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The SOUTHERN ECONOMIC JOURNAL

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THE UNIFORM CLASS RATE DECISION AND ITS IMPLICATIONS FOR SOUTHERN ECONOMIC DEVELOPMENT

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I

The investigation in the recent class rate case was begun by the Interstate Commerce Commission on its own motion in 1939;[1] and it was carried out through two allied proceedings, heard and submitted together: one investigating the lawfulness of the various territorial freight classifications,[2] and the other the lawfulness of the territorial and interterritorial class rate scales.[3] The findings were combined in a single decision which was rendered May 15, 1945.[4]

It appears that the investigation was prompted in the main by the following reasons, or circumstances. Foremost, possibly, was the steadily growing importance of interterritorial traffic. This continuous lengthening of freight hauls has been a persistent feature throughout the entire history of American rail transportation. It was this fixed trend which forced rate-making and regulation out of the bounds of the locality, or the individual road, into the wider sphere of the state, and then in turn, out of intrastate into interstate commerce. Interstate commerce, however, for many decades retained a pronounced regional character, centering in the three major areas of the United States known as Eastern (or Official), Southern, and Western Territories. Largely for this reason the existing class rate structure has become anchored, primarily, to regional traffic patterns; and regulatory bodies have tended hitherto to accept the validity of these boundaries. In recent years, however, the further lengthening of traffic movements and the increase of interterritorial rate cases have brought the regional viewpoint increasingly into question.

Technical advances during the past two decades, likewise, have produced radical changes in the transportation pattern. The development of motor carriers has been most significant among these; although the revival of inland waterways and the extension and improvement of pipelines, as well as improve-

[1] Orders dated July 29, 1939, as modified by subsequent orders dated August 1, 1940. 262 I.C.C., p. 454.

[2] No. 28310: *Consolidated Freight Classification.*

[3] No. 28300: *Class Rate Investigation, 1939.*

[4] 262 I.C.C., pp. 447–766.

ments on the railroads, have had far-reaching effects. As a result of these developments, in large measure, there has taken place in recent years a notable "flight" from class rates, which has left a large segment of the class-rate structure stranded and out of line with the main body of rates. Actually many of the class rates have become obsolete, and are no longer being used. Only reconstruction of the foundations of class rates could make them again an effective and important part of the rate-making machinery.

The investigation may appear, from another point of view, to have emerged logically out of a long series of separate investigations of classifications and class tariffs.[5] Of especial importance, as its immediate background, may be cited the regional class-rate investigations of the inter-war period.[6] These "revisions" greatly clarified a muddled class-rate situation by securing adoption of uniform percentage relationship between classes of commodities in each of the three major classification territories,[7] and by establishing substantial harmony among rate levels both within and between territories.[8] A long step toward uniformity and simplicity in class-rate scales, especially within the respective territories, was thus effected. The present case may be said, in one sense, to combine the objectives of all of the previous investigations; although it cannot be said that any of the previous investigations centered inquiry primarily upon the lawfulness of relative levels of *intra-* and *inter*-territorial class-rates scales throughout the United States as does the present one.

Finally, it seems likely that the investigation was undertaken, in some measure at least, in response to the oft-repeated protests by strong southern and western groups against what were deemed by them to be unreasonable and prejudicial class rate differentials. These protests had roots, no doubt, in earlier rate controversies and the age-old attitudes of these groups toward the railroads and their rates; but, in considerable degree, like the present investigation they grew out of the first two causes discussed above. In a broader sense, of course, all of these developments in transportation are a part of a changing economy.

II

Since the Commission clearly intends to enhance greatly the role of class rates, it is scarcely possible to understand either the directives or the implications in their decision without a knowledge of the total rate structure. The

[5] Frank L. Barton: "Uniform Freight Classification and the Interstate Commerce Commission," *Journal of Land and Public Utility Economics*, Aug. 1942, provides a survey of the development of freight classifications and the Commission's actions relating thereto. The previous actions of the Commission relating to both classifications and class rate tariffs are summarized in *Class Rate Investigation, 1939*, 262 I.C.C., pp. 456–465, 515–536.

[6] *Southern Class Rate Investigation* (1925) 100 I.C.C., p. 513, 109 I.C.C., p. 300, 113 I.C.C., p. 200, 128 I.C.C., p. 567; *Consolidated Southwestern Cases* (1927) 123 I.C.C., p. 203, 205 I.C.C., p. 601; *Western Trunk Line Class Rates* (1930) 164 I.C.C., p. 1, 204 I.C.C., p. 595; *Eastern Class Rate Investigation* (1930) 164 I.C.C., p. 314, 171 I.C.C., p. 481, 177 I.C.C., p. 156, 203 I.C.C., p. 357; *Lake and Rail Class and Commodity Rates* (1935) 201 I.C.C., p. 101, 214 I.C.C., p. 93; *Western-Southern Class Rates* (1938) 226 I.C.C., p. 497, 231 I.C.C., p. 315, 232 I.C.C., p. 81, 238 I.C.C., p. 681, 246 I.C.C., p. 119.

[7] See Table II, *infra*.

[8] 262 I.C.C., p. 520.

average citizen encounters extreme difficulty in trying to comprehend the distinctions between types of rates and the intricate methods of rate-making; he has access to no market data or other sources of information from which he may obtain even the crudest notions about prevailing rates and rate changes; and he can scarcely observe or calculate the effects of rates upon business costs and business location. He seldom pays a freight rate directly, and whenever he does so he has no means usually for comparing his rate with what others pay except when the services are quite similar. As a matter of fact, even the most competent rate expert would find it difficult, if not impossible, to supply such information with-

TABLE I

TYPES OF INTERSTATE RATES IN USE IN UNITED STATES, 1945

According to the rate base	According to the form of the tariff					
	Distance or mileage block	Key rate	Long and short haul	Point-to-point	Group	Column[a]
Class	Territorial scales	Interterritorial scales	4th Section departures allowed by I.C.C.	—	Moderate use in interterritorial scales	—
Exception	Class scales	Class scales	Class scales	—	Class scales	Numerous
Commodity	Some use	General use (usually the base rate in a group rate)	4th Section departures allowed by I.C.C.	Numerous	Prevailing form	Considerable use, especially in Southern Territory

[a] The Column rate is not, in reality, a separate form of tariff; nor is it a separate base type, though the term is frequently used with such connotation. It may be either an exception or a commodity rate: the contour of a first class scale is adopted and the level is fixed by selecting a percentage of the first class scale. It is therefore in form either a distance or a key rate scale. An exception column rate enjoys existing class rate fourth section departures, but a commodity column rate does not. The column rate is a kind of anomalous hybrid.

out considerable investigation and study; and even then, if he were able to give a competent answer, he would present it, probably, in qualified statistical averages which in turn would require interpretation. The following brief description of rates is confined to railroad rates, since the decision applies primarily to that group.[9]

A rate may be designated by both its base and its form of construction. Table I presents a generalized cross-classification of types of interstate rates as

[9] It covers also class-rated traffic of domestic water carriers. Most of this service was discontinued during the war; and the water carriers took little active part in the investigation. Motor carriers intervened in the case, although their rates were not under investigation. They were deeply concerned nevertheless about the possible effects of the decision upon their rates. 262 I.C.C., pp. 513–15, 681–87.

they exist today. Class rates are based on ratings in one of the standard freight classifications. The numbers of classes for each of the three major freight territory classifications are shown in Table II. Something over twenty thousand items—divided about evenly between carload and less-than-carload—are rated, or grouped, into each of these classifications. Some thousand items are also commonly rated in eight multiples of first class, ranging up to 400 per cent.[10] The other part of the class rate structure, the tariff, or rate scale, is constructed usually only for Class 1; which may also be designated the class-100-per-cent-scale. Rates for the other classes then may be calculated from the percentages of Class 1 which are indicated in Table II. These percentages are often referred to as the standard percentages. Other percentages are known as column percentages; and exception and commodity rates based on the latter percentages of the Class 1 scale are now commonly called column rates. Since the territorial class rate revisions mentioned above, all territorial—frequently designated *intra*territorial—class rate scales have been constructed on a mileage basis.

TABLE II

MAJOR RAILROAD CLASSIFICATIONS[a]

PERCENTAGE OF CLASS 100	REGULAR CLASS DESIGNATION			
	Official	Southern	Western: Western Trunk Line and Southwestern	Western: Mountain-Pacific
100	1	1	1	1
85	2	2	2	2
70	3	3	3	3
60	—	—	—	4
55	R26	4	4	—
50	4	—	—	5, A
45	—	5	A	—
40	—	6	—	B
37½	—	—	5	—
35	5	7	—	—
32½	—	—	B	—
30	—	8	C	C
27½	6	—	—	—
25	—	9	—	D
22½	—	10	D	—
20	—	11	—	E
17½	—	12	E	—

[a]Reproduced from *Class Rate Investigation, 1939*, 262 I.C.C., p. 467.

Class rates on shipments between the major territories differ significantly from those applicable intraterritorially. No common classification has been

[10] These are not included usually in representations of the standard classifications, though obviously they are a part of such classifications. See 262 I.C.C., p. 471, for a table which includes them.

developed; nor has any single principle been adopted with respect to the use of the standard classifications for this traffic. The territorial classifications are variously employed, with differences occurring frequently with respect to subterritories. Present practice has resulted, in part, from usages that have developed among the railroads, and, in part, from Commission prescription.[11] Interterritory class-rate scales likewise differ from intraterritorial ones: they have been constructed, primarily, by the use of key rates between important cities as bases, with a moderate use of groupings, and the addition of subterritorial and zone arbitraries.[12]

An exception rate is a modified class rate which is made applicable to a specified commodity within designated shipping limits. There are three types: (a) "those that transfer the rates on an article from one standard class rate column to another; (b) those that utilize intermediate columns in the system of class rates not assigned to any standard class"[13] (column rates), and (c) those that grant some favorable consideration regarding packaging, mixing or otherwise not permitted by the general rules and regulations governing class rate shipments.[14] Instances of type (c) also may fall in type (a) or (b). Types (a) and (b) are lower usually than class rates for the same commodities. Type (c) may take the same or higher rates, but the value consideration resulting from the rules departure may constitute the equivalent of a significant rate reduction. The limits within which exception rates have been introduced vary widely, from small areas and individual lines to territorial and interterritorial boundaries. Those of wide scope have become increasingly numerous in recent years.[15] In granting an article an exception rate, rather than a commodity rate (discussed below), the necessity of setting up a separate new rate structure is obviated; furthermore, the article retains any advantages or privileges, such as fourth section departures, extended to the class rates.

The commodity rate is the natural alternative to the class rate method of pricing transportation services. It is a published rate, or rate scale, which is applicable solely to shipments of a specified commodity, rather than to a class of commodities. It may be published by a single railroad for application exclusively to points on its own lines, or on its own and designated connecting lines; or it may be published by a group of roads, through their established rate-making agencies, for common application to specified origins and destinations or areas. When a commodity is generally accorded commodity rates there usually develops an individual rate structure for such commodity. Each commodity rate structure tends to differ, more or less, from every other, because its pattern is adjusted to the production, marketing, and loading characteristics of a particular commodity. For these reasons dissimilar rate structures develop in different regions of the country even for the same commodity. There are notably wide differences in

[11] 262 I.C.C., pp. 457–459.

[12] 262 I.C.C., pp. 516–518, 526–536, 562; *Class Rate Investigations, supra.*

[13] 262 I.C.C., p. 562.

[14] *Ibid.*, p. 549.

[15] *Ibid.*, pp. 476–479, 548–550, 562.

the areas which they cover. Local commodity rates apply on commodities that normally are shipped short distances; if regional scales have been developed for such articles, they may very likely be short distance scales. Conversely, national commodity rate structures apply on commodities of nationwide movement. Between these extremes there exists a great array of subregional, regional, and interregional structures. The growth of regional specialization and interregional exchange have steadily increased the scope and importance of interregional and national commodity rate structures. A commodity rate structure may become highly complex whenever the commodity concerned develops a wide range of grades, sizes, weights, textures, or other qualities, and a large number of separate though interrelated markets. Under such conditions it is likely to adopt a sort of classification and to develop various substructures. It tends to take on some of the characteristics of a class rate structure. An example of a very elaborate commodity rate structure is the one on cotton goods: it blankets the entire United States, and constitutes an adjustment, in one interrelated pattern, of all rates from all major manufacturing centers to all important marketing areas; actually it is a rather loose integration of several substructures which have developed around the main channels of the cotton goods traffic.

The relative importance today of each type of rate, in terms of physical volume of traffic moving thereon, is indicated by Tables III and IV. For carload traffic, which constitutes nearly ninety-nine per cent of total freight shipments in the Unites States, percentages are given for the grand total and for each of the territorial and interterritorial movements. Such an extensive breakdown for less-than-carload shipments is not available. The percentages for carload traffic are changed somewhat, though not significantly, if revenue is used as a basis: for the country as a whole, on the basis of the same data, class rates yield 6.3 per cent; exception rates, 16.1, and commodity rates, 77.6 per cent of earned revenue.[16]

Since the information from which Tables III and IV were derived was taken from waybills, the percentages reflect the proportions of shipments which actually moved on each of the three types of rates, and not merely the relative frequency with which various articles appear in the published rates. The mere existence of a published rate does not reveal how much, if anything, is being shipped on such rate. The effective rate is the actual one. Table III indicates that class rates, in most areas of freight movement, are more largely nominal than real. On carload shipments which originated in the South, class rates were charged on approximately only 2 per cent; whereas exceptions accounted for 6 per cent, and commodity rates for 92 per cent.[17] Class rates were much more extensively utilized within Eastern territory; but, with one exception, it was only on shipments from Eastern to other territories that they constituted a major portion of the freight charges. The use of class rates on carload shipments had been declining relatively for some time and in recent years has been superseded largely by the introduction of exceptions. This trend has been

[16] 262 I.C.C., p. 564.
[17] *Ibid.*, p. 479.

especially pronounced in the South,[18] where less-than-carload traffic likewise has been removed from the class rate in large degree. This latter type of traffic has

TABLE III

ALL CARLOAD TRAFFIC TRANSPORTED ON SEPTEMBER 23, 1942[a]

TERRITORY, OR TERRITORIES	PER CENT OF CARLOADS		
	Class rates	Exception rates	Commodity rates
United States	4.1	10.7	85.2
Intraterritorial:			
Official, or Eastern	5.8	17.6	76.7
Southern	1.8	6.0	92.2
Western Trunk-line	.6	.2	99.2
Southwestern	2.4	4.4	93.2
Mountain Pacific	1.7	.0[b]	99.7
Interterritorial:			
Official to Southern	12.6	36.3	51.1
Official to Western Trunk-line	12.3	35.4	52.3
Official to Southwestern	22.5	52.0	25.5
Official to Mountain-Pacific	11.3	.0[b]	88.7
Southern to Official	.9	4.9	94.2
Southern to Western Trunk-line	1.5	13.5	85.0
Southern to Southwestern	6.1	22.1	71.8
Southern to Mountain-Pacific	4.1	4.9	91.0
Western Trunk-line to Official	3.1	1.0	95.9
Western Trunk-line to Southern	6.1	3.1	90.8
Western Trunk-line to Southwestern	13.0	6.2	80.8
Western Trunk-line to Mountain-Pacific	2.6	.0	97.4
Southwestern to Official	1.5	3.4	95.9
Southwestern to Southern	1.2	4.3	94.5
Southwestern to Western Trunk-line	2.0	3.0	95.0
Southwestern to Mountain-Pacific	3.9	.0	96.1
Mountain-Pacific to Official	0.7	.0	99.3
Mountain-Pacific to Southern	1.5	.0	98.5
Mountain-Pacific to Western Trunk-line	0.7	.0	99.3
Mountain-Pacific to Southwestern	2.1	.0	97.1

[a] 262 I.C.C., pp. 479, 564. The data were collected and analyzed, and the above percentages were computed, by the Commission's Bureau of Transport Economics and Statistics with the aid of its Bureau of Traffic. Railroad waybills constituted the primary source of the data.

[b] Less than 0.05 per cent.

long been considered to be especially suitable for class and express rates; but in Southern territory almost 60 per cent of it moves on commodity rates, and the

[18] 262 I.C.C., p. 477.

greater part of the remainder moves on exception rates; thirty-five hundred less-than-carload items were given exceptions to the class rate at one time.[19] Class rates, as actual prices paid for services, simply have ceased to exist within the South in large measure. The continued inclusion of them in the overall published structure of rates resembles somewhat the printing of obsolete words and usages in a dictionary.[20]

Commodity rates have long been the rule on the raw and partly processed products of agriculture, mining, and forestry. Class rates, on the other hand, have been introduced most generally on finished manufactured products, where classification very greatly simplifies the complex problems of rate determination. Nevertheless, commodity rates have been extended increasingly to manufactures, possibly as a result of the large growth of localized mass production of standardized goods. They have always moved the far greater bulk of Southern factory products. They were first introduced to move the crude and partially

TABLE IV

LESS-THAN-CARLOAD TRAFFIC TRANSPORTED SEPTEMBER 8–14, 1939[a]

TERRITORY	PER CENT OF POUNDS CARRIED	
	Class and exception rates	Commodity rates
Official	95.3	4.7
Southern	42.0	58.0
Western	71.4	28.6

[a] 262 I.C.C., pp. 568–9. The data upon which this table was constructed were collected by the Association of American Railroads. Comparable percentages on interterritorial movements were not presented.

processed goods of early factories to Northern markets, and they have since been extended to other products *pari passu* with the expansion and diversification of industry in the South.

III

It should now be possible to define more specifically the issues under investigation in the Class Rate Case. It is obvious that differences among the classifications can cause differences in rate charges just as do differences in the class-rate scales. The three major classifications exhibit two kinds of dissimilarities: in ratings, and in percentage relationships to class one. Table V shows the degrees of uniformity and unlikeness in ratings that prevail among the three classifications. Reference to Table II above will reveal the differences in percentage relationships. The degree of uniformity in ratings is high for less-than-carload

[19] September 1, 1945. *Ibid.*

[20] It is not meant to imply that the class-rate structure performs no function; only that it is used very little as such. It provides, of course, the framework for the exception rates, and its scales have been used rather extensively as bases of reference in revision and establishment of commodity rates.

traffic;[21] but diversity is the rule on carload freight. Percentage relationship among the classes likewise exhibit many differences; only classes 2 and 3 are uniform for all three classifications.

With regard to levels of class rates, there exists no uniformity among territorial or interterritorial rates; however, it is not possible to determine precisely what are the amounts of the differentials. The intraterritorial scales differ not only in levels but in rates of progression; and the interterritorial class rates vary widely both between and within groups of interterritorial movements—they even vary greatly for any single point. The amounts of the differentials, therefore, can be derived only as statistical averages of scale points or of aggregates of typical rates.[22] They are presented usually as percentages. The Commission's research staff has found that first class rates within Southern territory average about 37.7 per cent higher than those within Eastern territory.[23] In order to

TABLE V

DEGREES OF UNIFORMITY OF RATINGS IN THE THREE MAJOR CLASSIFICATIONS[a]

	LESS THAN CARLOADS		CARLOADS		GRAND TOTALS[b]	
	Number of ratings	Per cent	Number of ratings	Per cent	Number of ratings	Per cent
Totals	10,134	100.00	10,664	100.00	20,878	100.00
Uniform in the 3 classifications	8,622	85.08	3,868	36.27	12,554	60.13
Alike in:						
Official and Southern	9,343	92.18	5,114	47.96	14,524	69.57
Official and Western	8,876	87.59	4,522	42.40	13,474	64.57
Southern and Western	8,822	87.05	6,320	59.27	15,206	72.83
Unlike in any 2 classifications	337	3.32	2,444	22.92	2,782	13.33

[a] Reprinted from 262 I.C.C., p. 469. The "any quantity" columns are omitted.

[b] Eighty "any quantity" ratings are omitted from separate analysis in the table, but are included in the grand totals.

present comparisons for interterritorial rates, the staff also calculated distances and class rates between the important cities for each of the interterritorial groupings.[24] Table VI, based upon these figures, gives the percentage differentials over Eastern territorial class rates on interterritorial class rates between the South and the East for typical cities. It will be observed that wide differences in rates exist both for individual cities and between cities in each of the territories. Johnson City, with the lowest average differential, exhibits almost

[21] However, "substantial disparities exist on individual article items": 262 I.C.C., p. 469.

[22] The averages should be weighted by volumes of traffic movements if it is intended to ndicate effective rate differentials.

[23] 262 I.C.C., p. 592; Appendix 8 reproduces the Class 1 scales; Appendix 9, Table I, gives the distances and rates between important cities within each territory.

[24] *Ibid.*, Appendix 9, Table II.

as wide a range of individual differences as the spread between its average and that of Miami with the highest average. Assuming these rates to be typical, it would appear that class rates on interterritorial shipments between the East and the South average about 28 per cent above Eastern territorial class rates; but that individual rates vary all the way from approximate equality, as is the case with a number of Johnson City's rates, to nearly 50 per cent higher, as with a like number of Miami's rates. The differentials on other interterritorial movements show similar divergencies among the different points, but they average higher.[25] Table VII presents some typical percentage differentials for

TABLE VI

INTERTERRITORIAL CLASS RATES BETWEEN EASTERN AND SOUTHERN CITIES EXPRESSED AS PERCENTAGES OF THE EASTERN CLASS RATE SCALE FOR EQUIVALENT DISTANCES

	ATLANTA, GA.	CHARLESTON, S. C.	JACKSON, MISS.	JACKSONVILLE, FLA.	JOHNSON CITY, TENN.	MEMPHIS, TENN.	MIAMI, FLA.	MONTGOMERY, ALA.	NASHVILLE, TENN.	NEW ORLEANS, LA.	RALEIGH, N. C.	CITY AVERAGE
Baltimore, Md.	132	130	133	127	103	131	136	131	137	130	115	128
Bangor, Me.	114	110	115	112	106	116	122	115	121	114	112	114
Boston, Mass.	118	115	120	117	103	120	125	119	123	118	108	117
Charleston, W. Va.	143	139	141	138	109	133	148	140	141	137	116	135
Chicago, Ill.	137	138	135	138	117	128	145	135	133	136	113	132
Dayton, O.	143	139	135	142	123	128	149	141	138	140	114	136
Detroit, Mich.	139	133	133	138	114	125	148	138	132	136	113	132
Montpelier, Vt.	121	115	122	118	107	129	127	121	134	120	111	120
New York, N. Y.	126	122	128	123	104	125	131	127	130	125	113	123
Pittsburgh, Pa.	146	128	135	129	112	125	138	140	132	138	113	130
Richmond, Va.	143	143	135	132	102	135	149	136	144	136	127	135
St. Louis, Mo.	140	140	143	143	126	141	149	143	138	140	112	138
Syracuse, N. Y.	125	122	129	123	105	125	132	128	125	127	111	123
Terre Haute, Ind.	143	142	141	140	124	135	148	141	140	138	110	137
City Averages	133	129	132	130	111	128	139	132	133	131	113	
Total Average												128

Southern-Western interterritorial class rates: there is a pronounced difference between Southern-Western Trunk Line and Southern-Southwestern differentials, though Denver and Wichita rates among the former are comparable to the latter rather than to those of their own group. Miami rates again show the highest percentages above Eastern class rates, but Raleigh replaces Johnson

[25] All interterritorial class rates reflect the interterritorial levels of their respective territories. The Southern intraterritorial level differing least from the Eastern, it follows that the Southern-Eastern interterritorial level should differ least among the interterritorial levels.

City with the lowest. Johnson City's rates with Southwestern points are among the highest, exceeded among Southern cities only by those of Miami.

IV

Are the manifold disparities among classifications and class rates, indicated above, unreasonable and/or prejudicial under the sections of the Interstate Commerce Act which provide for the regulation of rates? These were the questions under investigation in the Class Rate Case. The Commission found the ratings in the existing classifications to be both unreasonable and prejudicial in their effects;[26] and it directed that a uniform classification should be established. It further specified that additional classes should be set up, and that just and reasonable relationships between classes, in percentages of class 1 (class 100) should be as follows: Classes 400, 300, 250, 200, 175, 150, 125, 100, 92.5, 85, 77.5, 70, 65, 60, 55, 50, 45, 40, 37.5, 35, 32.5, 30, 27.5, 25, 22.5, 20, 17.5, 16, 14.5, and 13. No changes were prescribed regarding rules and regulations as to descriptions of articles and carload minimum weights, since substantial

TABLE VII

INTERTERRITORIAL CLASS RATES BETWEEN SOUTHERN AND WESTERN CITIES EXPRESSED AS PERCENTAGES OF THE EASTERN CLASS RATE SCALE FOR EQUIVALENT DISTANCES

	ATLANTA, GA.	CHARLESTON, S. C.	JACKSON, MISS.	JACKSONVILLE, FLA.	JOHNSON CITY, TENN.	MIAMI, FLA.	MONTGOMERY, ALA.	NASHVILLE, TENN.	RALEIGH, N. C.	CITY AVERAGES	TOTAL AVERAGE
Western Trunk Line:											
Cedar Rapids, Ia.	139	144	139	144	126	150	139	129	125	137	
Denver, Colo.	158	158	164	161	150	168	160	152	144	157	
Green Bay, Wis.	138	139	135	141	127	149	134	127	117	135	
Kansas City, Mo.	140	144	157	148	139	160	147	136	128	143	
Minneapolis, Minn.	140	141	140	143	134	153	141	132	129	139	
Wichita, Kan.	158	157	162	155	145	168	160	150	137	155	
City Averages	145	147	150	149	137	158	147	137	130		144
Southwestern:											
Dallas, Tex.	160	158	161	159	163	165	161	162	157	161	
Houston, Tex.	157	156	157	155	159	166	157	160	156	158	
Little Rock, Ark.	153	153	153	155	158	161	151	148	151	154	
Okla. City, Okla.	156	157	161	158	159	165	159	155	147	157	
San Antonio, Tex.	160	159	158	159	160	168	159	162	160	161	
Shreveport, La.	155	156	151	154	159	163	154	157	156	156	
City Averages	157	156	157	157	160	165	157	157	154		158

[26] Illinois classification was also included in the investigations and findings. It is similar to Eastern, or Official, classification except that it has five additional classes below class 4. It has been omitted from the discussion because of its limited independent application.

uniformity now exists. The carriers should be given reasonable time to carry out the directives.[27]

The Commission found all intraterritorial and interterritorial class rates (except those pertaining to Mountain-Pacific territory, and intraterritorial rail-and-water coastal service rates and short- or weak line arbitraries) to be unjust and unreasonable, in violation of section 1 (4) and (5)(a) of the act; it also found the relation between interterritorial class rates applicable from Southern, Southwestern, and Western trunk line territories to Official and Illinois territories, on the one hand, and the intraterritorial class rates applicable within Official and Illinois territories, on the other, to favor unduly the latter and shippers and receivers therein, and to be unjustly prejudicial, in violation of section 3 (1) of the act. It prescribed as a basis for reasonable and non-prejudicial class rates, on all of the above indicated intraterritorial and interterritorial traffic, a single maximum class 1 scale of rates.[28] It further directed that the revised uniform class rates and classification ratings should go into effect simultaneously.[29]

The prescribed maximum first-class scale is a distance rate scale extending up to 2,500 miles. As is usual in freight scales of the distance type, the rates increase by mileage blocks—in this instance by blocks of 5 miles up to 100, of 10 miles from 100 to 240 miles, of 20 miles from 240 to 800 miles, of 25 miles from 800 to 2,200 miles, and of 50 miles beyond 2,200 miles. The scale is a tapering one: starting at a relatively high rate, it rises rather steeply through the first few blocks, then slopes off somewhat and maintains very nearly a constant rate of progression through the main body of the scale, and finally flattens out noticeably in the higher distances. The general contour of the scale is relatively smooth. In determining the level of the scale the Commission, obviously, had to be guided by what it found to be the varying degrees of unreasonableness in the existing class-rate scales. Since all of the scales were found to be unreasonable, it could not adopt the level of any particular one. The investigation centered primarily around the divergence between the Eastern, or Official, intraterritorial class rate scale, on the one hand, and all other class rate scales, both intraterritorial and interterritorial, on the other. The Commission adopted the view, apparently, that the unreasonableness and prejudice did not inhere solely either in the one being too low or the others being too high, but rather in the considerable divergence between the two. It would appear that the Commission chose a median position between the level of the Eastern scale and the approximate average of the levels of the others, with some modifications dictated by other considerations.[30] The average level of the prescribed maxi-

[27] 262 I.C.C., p. 509–512.

[28] *Ibid.*, p. 766. This is Appendix 10.

[29] *Ibid.*, pp. 700–702.

[30] For example, the maximum scale begins at a higher rate and rises more steeply through the first few blocks than do almost all of the present scales. This undoubtedly resulted from the conviction that all of the present scales are unduly depressed in this particular range.

mum scale through the 1,500 mile block, which is as far as the Eastern scale extends, exceeds the average level of the latter by just over 16 per cent. Thus it would lie approximately half-way between the Eastern scale level and the average of the levels of the other scales if it could be assumed that the latter average is in the neighborhood of 33 per cent higher than the Eastern scale, which is probably not far from actual facts.[31] The Commission's directive requires that all rates exceeding the maximum scale shall be lowered eventually to the level of it. The interim reductions, discussed hereinafter, are subject to the maximum scale as a *minimum*; but class rates which already lie below the maximum scale, other than Eastern ones, are not affected by this immediate action. Whether the Commission will require that all class rates, Eastern and other, that are lower than the maximum scale shall be raised to coincide with the scale is not stated explicitly in its decision. The fact that the interim reductions are limited to the level of the maximum scale as a minimum has suggested to some that the scale is intended in the final adjustment to be a maximum-minimum scale for all rates. There has been considerable discussion of this point and differences of opinion have been expressed as to what the Commission intends.

The Commission realized that considerable time would be required for the railroads to complete all of the classification and rate scale revisions. Therefore, it also issued an interim directive, based on its findings, which is designed to effect a considerable move immediately in the direction of eventual uniformity; but which shall not prejudice action on the final revision. The interim order requires a ten per cent increase in Eastern intraterritorial class rates, and a ten per cent decrease in Southern, Western Trunk line, and Southwestern intraterritorial class rates and in all interterritorial class rates between these territories and also between these territories and Eastern territory; all decreases shall be subject to observance of the prescribed maximum scale as a minimum.[32] The interim revisions first were ordered to become effective August 30, 1945. Later a postponement to November 30 was granted, and still later a further postponement to January 1, 1946. However, on December 21, 1945, the Federal court at Utica, New York, on petition of nine states in Eastern territory, issued a temporary injunction restraining the Interstate Commerce Commission from putting the interim decision into effect, pending further hearings by the court. Should the district court then grant a permanent injunction, the case no doubt will be carried to the Supreme Court, and thus considerable time will elapse before final action can be taken on the Commission's decision.

V

The primary grounds upon which the Commission based its decision appear to have been, first, the need for a general revamping of the entire class rate structure; second, the evidence of the cost studies prepared by its Division of

[31] It is somewhat doubtful whether a realistic average could be computed for such a large number of scales possessing so many diverse contours and types of construction.

[32] 262 I.C.C., pp. 702–706.

Transport Economics and Statistics; and last, certain provisions in the Transportation Act, 1940. Each of these will be considered briefly.

It is apparent that the existing class-rate structure has become obsolete in considerable measure. This is confirmed by the very small percentage of traffic moving on class rates, by the wide use of exceptions in the place of class rates, and by the great and increasing preponderance of commodity rates. The classification principle provides an extremely useful basis for establishing rates or prices. It makes for simplicity and economy, and it supplies a mechanism whereby orderly relationships among rates may be established. Such achievements are extremely desirable in making rates for a considerable portion of present-day traffic, in view of the multiplicity of individual items involved. The utility of a class rate structure may well extend beyond the range of its own exclusive rate application. Its rate scales may be adopted as the bases for numerous commodity rates, whereby greater uniformity is injected into the latter rates, and an effective mechanism is provided for establishing equitable adjustments between the commodity rates of different areas and industries, and between commodity rates and class rates. These functions cannot be performed effectively unless class rates constitute a realistic part of the over-all rate structure, and move a significant portion of the traffic. If there are innumerable complicating differences among classification ratings and class-rate scales, and if the class rates are so out of line with actual rates that they are seldom applied, then the utilization of the class-rate structure requires so much adjustment for such disparities that it may well become an incumbrance rather than an aid to efficient rate-making. The Commission unquestionably intends by its decision to bring class rates within the range of a large body of present effective rates, especially of the exceptions. It expects that most of the present exceptions will become embodied in the new regular class rate structure. It recognizes the legitimacy of exceptions, but does not believe that class rates should be the exceptions to the exceptions.

This is not the place to discuss the principles and problems of cost in rate-making. The Commission's research staff has been devoting increasing attention to cost data during recent decades, and has introduced cost analyses in a large number of rate cases. The most comprehensive cost study completed to date is that covering railroad freight service costs in the various rate territories for 1939, prepared under the direction of Ford K. Edwards, Principal Economist in charge of the Cost Section.[33] This study was submitted widely to railroad and shipper groups and individual cost experts for criticism, and has been revised and corrected in the light of suggestions and criticisms. The original and revised studies were submitted in evidence in the present investigation and their substance is reproduced in the decision.[34] The study shows that there is little difference in the cost of supplying transportation in the South as compared with

[33] Interstate Commerce Commission, Bureau of Statistics: *Railroad Freight Service Costs in the Various Rate Territories, 1939*; in 2 pts. (1941). Also reproduced in substantial part in Senate Document No. 63, 78th Cong., 1st Sess., as *Rail Freight Service Cost Studies in the Various Rate Territories of the United States.*

[34] 262 I.C.C., pp. 571–591.

the East.[35] Costs in Western territory range from 6 to 10 per cent higher. Considerable variations in transportation costs do exist, but they are far wider within each of the territories than any average differences that exist between territories. Therefore, the argument for differences in rate levels as between territories on account of differences in cost would apply more logically to intraterritorial rates. However, since intraterritorial class rates are substantially uniform within each territory, the maintenance of differences in class rate levels as between territories scarcely appears defensible. Many criticisms of the cost study were offered by railroads and shippers. Where they pointed out errors, such were corrected; where they offered constructive suggestions, in the opinion of the research staff, modifications were made. By and large the criticisms did not shake the general validity of the study in the minds of a majority of the Commission, and much weight was attached to it. The lack of any marked dissimilarities in costs interterritorially east of the Rocky Mountains undoubtedly argued strongly for a basic uniformity in class rates within that large area. This does not mean that the Commission will accept no deviations from uniformity on account of cost differentials; it means only that the Commission finds that such are no longer justifiable on a territorial basis, except with respect to Mountain-Pacific territory.

The 1940 amendments which strongly influenced the decision were the following: (a) the inclusion in section 3(1)—relating to discrimination—of the words "region, district, territory;" (b) the provision designated 5(b) authorizing the Commission to investigate rates on manufactured products, agricultural commodities, and raw materials between and within territories to determine whether such rates are unjust, unreasonable or unlawful in any other respect in and of themselves or in relation to each other; and (c) the statement of "National transportation Policy," especially the declared purpose "to encourage the establishment and maintenance of reasonable charges for transportation services without unjust discriminations, undue preferences or advantages, or unfair or destructive competitive practices."[36] The Commission interpreted the amendment to section 3(1) as intended definitely to broaden the traditional legal concept of discrimination so as to include within its purview all undue or unreasonable preferences or advantages, all undue or unreasonable prejudices or disadvantages, as between regions, districts, or territories, viewed as separate entities.[37] It notified Congress that the present investigation should be considered as undertaken in response to section 5(b);[38] and in this connection, apparently, it included in the text of the decision extensive statistics of the distribution of natural resources and economic development in the principal freight rate territories,[39] though it did not indicate clearly the relevance of such data to the investigation and the findings. Broadly speaking, it interpreted the intent of

[35] There is some difference, one way or the other, depending upon whether 1930–39 or 1937–41 figures are used, or whether the Pocahontas territory is or is not included in Eastern, and Kentucky is or is not included in Southern.

[36] 262 I.C.C., pp. 688–9.

[37] *Ibid.*, pp. 689–92.

[39] *Ibid.*, pp. 536–548.

Congress in the three amendments to be: To bring about, more realistically, a national system of transportation in all major aspects, to secure "a greater degree of equalization, harmony, and uniformity in the different regional or territorial rate structures of the country" and to empower the Commission ". . . to remove any such discriminations found to exist in a proper proceeding."[40]

The task confronting the railroads of developing a uniform classification is a sizeable one. Reference to Table V above will reveal the great lack of uniformity in ratings—especially with respect to carload items—among the present classifications. Furthermore, the required changes in rate scales will affect the present rating significance of every one of the twenty thousand odd items. Estimates of the length of time it will consume vary from five to ten years or longer. Revision of rates may not present quite such an involved problem. If the general maximum rate scale prescribed by the Commission is intended to constitute a general minimum scale as well, its adoption would be a relatively simple matter. However, if such is not the case, the establishment of the new rate scales could likewise become a long-drawn-out procedure, requiring, no doubt, further hearings before the Commission. Furthermore, even the adoption of the scale as a maximum-minimum scale might be delayed considerably by the task of disposing of the problem of exception rates and possibly of some commodity rates.

VI

Since the interim rate changes, at present held up by a court injunction, are intended to move class rates a long step toward their final pattern as conceived by the Commission, some of the principal features of these immediate changes will be pointed out.[40a] The required increase of ten per cent in Eastern, or Official, intraterritorial class rates will apply on substantially all class rates within that territory since, save for one or two distances and within New England subterritory, they are now ten or more per cent below the prescribed general maximum scale. The prescribed ten per cent decreases in class rates within the other territories and on interterritorial traffic, however, will not amount to that uniformly, since they are subject to the general maximum scale as a minimum, and since many of these rates now do not exceed that scale by as much as ten per cent; in fact, a considerable number are already lower than that scale. This is especially true with regard to those pertaining to the South. The Southern intraterritorial class rates for distances above 85 miles exceed the general maximum scale by more than ten per cent, and consequently will be reduced by the prescribed ten per cent; rates for distances of 65 to 85 miles inclusive are less than ten per cent above the general maximum scale, and so will be reduced by varying percentages less than ten; the rates at 5 miles and 60 miles are now the same as the maximum scale; whereas for distances between 5 and 60 miles the rates are already lower than the maximum scale.

[40] *Ibid.*, p. 692.

[40a] All calculations with regard to interim rate changes are based upon appendices 8, 9, and 10 of the Class Rate Decision: 262 I.C.C., p. 744–766.

Percentage relationships to the general maximum scale among Official-Southern interterritorial class rates vary all the way from 15 per cent below to 40 per cent above the maximum scale. These wide differences appear primarily between areas; although there are distinct tendencies for the percentages to decline with distance between the South and the northeastern part of Official territory and to increase with distance between the South and the western—particularly the southwestern—part of Official territory. Interterritorial rates between most Southern points outside of Carolina and Eastern Tennessee territories, on the one hand, and most points in Official territory outside of New England, New York State and nearby areas, on the other, exceed the general maximum scale by more than ten per cent and therefore will be reduced by the full ten per cent. Atlanta rates are typical: between that city and Boston the present first class rate is $2.30, the maximum scale rate is $2.27, which permits approximately a one per cent reduction; with New York the rates are $2.12 and $1.96 respectively, permitting a reduction of seven and one-half per cent; with Syracuse the reduction will be six per cent; with points outside of the New England-New York area the present rates exceed the maximum scale by more than ten per cent, and so will be reduced by the full ten per cent. The situation is quite otherwise, however, with respect to the interterritorial class rates of Carolina and Eastern Tennessee territories. Raleigh's class rates are probably fairly typical of those in Carolina territory: class rates between Raleigh and Official territory, except between Raleigh and the Virginia border cities, such as Richmond and Lynchburg, are already either approximately the same or below the general maximum scale; in fact, they average a little over two per cent below it. It appears, therefore, that there will be no reductions on interterritorial rates between Carolina territory and Official territory except on those pertaining to the area of the Virginia border cities. The only substantial gain from the decision by Carolina territory on interterritorial class rates with Official territory, therefore, will be the ten per cent increase in Official territory. Interterritorial class rates of Eastern Tennessee are similar to those of Carolina territory except slightly lower. Interim reductions on interterritorial rates between the South and Western Trunk Line and Southwestern territories will amount to the full ten per cent in most cases, except between Carolina territory and Missouri River points, which rates now exceed the maximum scale by approximately nine per cent.

VII

Having suggested in what respects the decision may simplify rate-making and regulatory problems, and having indicated briefly the mechanical results that will accrue in the form of rate changes, we come now to consider the truly difficult question which, in large measure, dominated the entire investigation; namely, what may be the economic effects of the decision? The answer to this question cannot readily be found in, or be translated into, strictly mechanical or quantitative terms; nor can it be easily interpreted in the particular; rather it involves, primarily, possibilities of broad general changes in the structure of production and the distribution of the national income.

The first question regarding economic effects may well be: how can the required changes in class rates have any significant immediate or long-run effects if class rates today apply on such a negligible fraction of freight traffic?[41] More specifically, how can the reduction of rates on 2 per cent of the traffic originating in the South mean much in the future economic development of that region? Obviously it cannot unless it produces changes in relative prices and rates of production far greater than the present importance of class rates and class-rated traffic implies: there must result significant changes in the Southern industrial pattern, sizeable net increases in production, perceptible reductions in numerous prices, and possibly changes in other railroad rates, if real incomes in the South are to be very greatly affected.

The problem of prediction is somewhat analogous to that of charting the effects of changes in tariff rates. The results will depend upon comparative prices and costs and relative elasticities of supply and demand in each case. Tariff rates that are apparently nominal because seldom paid may, nevertheless, be protecting monopolies or high-cost producers, or holding back the development of certain industries; and consequently, their reduction or removal may have far-reaching effects. On the other hand, if domestic costs and prices of the "Protected" articles are already as low or lower than international costs and prices, the elimination of the tariff rates could have slight effect other than that of broadening somewhat the bases of competition. Railroad rates likewise may shelter monopolies or high-cost producers, may protect infant industries, or may retard the development of industries. When such is the case, changes even in nominal rates may produce notable results. However, if effective rates are already well below the level of such nominal rates, the reduction of the latter to the level of the former is not likely to cause significant changes in the economy, except that it may tend to give greater unity to the general rate structure and to broaden somewhat the bases of competition.

There is one important difference in the effects of tariffs and railroad rates, which relates to costs. Tariffs involve real costs, of course, but not directly in the form of any service as a condition of their payment. A railroad rate represents compensation for labor, capital, business ability, and risk which must be paid on the same bases as are paid compensations for like factors in the occupations which the railroads serve; otherwise service will deteriorate, which is likely to increase the costs of production in other industries. A community can scarcely profit, either immediately or in the long run, if the gain of one group is derived through an equal loss to another which impairs the capacity of the latter to render efficient service to the community. The strongest justification for rate adjustments in the present case appears to rest on the fact that the level of Southern railway costs warrants it.

The Southern railroad rate structure has contained, and still does contain, numerous protective features. The narrow limits of space make it difficult to

[41] See Table III, *supra*. The investigation produced very few witnesses from the South who actually were paying any class rates.

present even the bare outlines of the picture. One must get a view of the total rate pattern and the modern industrial pattern. Tables VIII and IX give some indications of the levels of principal intraterritorial and interterritorial commodity rates. Unfortunately no adequate data are available for Southern exception rates, but such as there are suggest that their levels conform more closely to the commodity rate levels, relatively speaking, than to the old class-rate levels. The general pattern of modern industry presents two rather pronounced locational groupings. Some industries tend to be raw material-, fuel-, and power-

TABLE VIII

Relative Levels of Southern Intraterritorial Commodity Rates[a]

SOUTHERN COMMODITIES	PER CENT OF OFFICIAL COMMODITY RATE LEVEL
Brick	75–80 per cent of Trunk Line; 90 per cent of Central Freight territory.
Coke	100 per cent; Alabama intrastate scale is lower.
Iron Ore	Alabama intrastate scale is 79 per cent of Official territory.
Iron and Steel Scrap	50,000 minimum: lower on 70–480 mile hauls, higher on others; 80,000 minimum: substantially lower on most hauls, 40–1,000 miles.
Pig Iron	72 per cent.
Fertilizer and Fertilizer Materials	100 miles:[b] 48 per cent, 56 per cent; 200 miles: 65 per cent, 73 per cent; 300 miles: 93 per cent, 101 per cent.
Lime	100 miles:[b] 96 per cent, 102 per cent; 380 miles: 90 per cent, 99 per cent; 700 miles: 86 per cent, 97 per cent.
Logs	Considerable part of South: 100 per cent; elsewhere: 68–88 per cent.
Lumber	50 miles: 64 per cent; 100 miles: 68 per cent; 200 miles: 80 per cent; 300 miles: 86 per cent; 400 miles: 96 per cent; 600 miles and over: 100 per cent.
Pulpwood	200 miles: 57 per cent; 660 miles: 66 per cent.
Sand, Gravel, Crushed Stone, and Slag	There are 3 scales in Official territory. Southern scale is lower than 2 of them; is same as third for some distances, lower for others.
Sulphuric Acid	70–75 per cent.

[a] 262 I.C.C., pp. 593–600.

[b] The first percentage figure for each distance refers to the Trunk-Line scale; the second refers to Central Freight territory scale.

oriented, while others tend to be market-oriented. In general, those that locate in the vicinity of raw materials, fuel, and power sources perform the first stages, or the cruder or simpler processes, of manufacturing; they are frequently large-scale, power-driven, heavy fuel-consuming, unskilled-labor-using industries; some, notably in the food industries, complete all stages of processing, especially if the products are marketable readily in standardized forms. Market-oriented industries are typically the diversified, finishing industries, plus a wide range of industries that are able to secure raw materials near at hand. There are many more small-scale shops among such industries and the average of skills employed

TABLE IX

Relative Levels of Southern Interterritorial Commodity Rates[a]

Commodities shipped between Southern and Official Territories	Per cent of Official Territory rates on same commodity
Aluminum Sheet and Plate	92 per cent
Automobile Tires	Some are lower; others are same
Bauxite	94 per cent
Boots and Shoes	90 " "
Canning Supplies: Alum, turmeric, glass bottles and jars, metal covers, tops, and caps—to Faison, N. C.	68.3–91.5 per cent
Cigarettes	77 per cent
Cigarette Paper, L. C. L.	90 " "
Smoking and Chewing Tobacco	97 " "
Shelled Peanuts	95 " "
Bricks and clay products; Distilled liquors; Foundry products; Hosiery; Tanners' glue; Stone, marble, and slate; Lime; Coke; Sugar; Coal and wood stoves, furnaces, heaters; Gas stoves, furnaces, heaters; Cast-iron pipe fittings, L. C. L.; Iron body valves; Brass pipe fittings; Brass cocks and valves; Soapstone and talc; Enamelled iron and steel plumbers' goods; Papeteries; Ferromanganese; Ferroalloys; Unfinished aluminum, blanks, stampings, and shapes; Asphalt, petroleum, coke; Leather; Pig-iron; Aluminum pig or ingot; Cast-iron pipe; Cast-iron hardware; Hydrants and fire plugs; Upholstering fabric and trimming; Cotton flannels or napped fabric; Wooden automobile-body parts	100 per cent
Livestock	100–101 per cent
Green salted hides	101–106 " "
Manufactured tobacco	106 " "
Cottonseed	107 " "
Finished cotton piece goods	108–109 " "
Wood pulp, paperboard, paper boxes, pulpboard, paper bags and other paper articles	110 " "
Clay	112 " "
Hides	127 " "
Steel bars and sheets	129 " "
Cooking and salad oil	137 " "
China plumbers' goods	139 " "
Chinaware pottery; Tractors	140 " "
Mechanic tools	151 " "
Asphalt paint	153 " "
Newsprint	159 " "

[a] 262 I.C.C., p. 601–604. The large number in the 100 per cent group results in the main from a considerable group of commodity rate cases recently decided by the Commission: 140 I.C.C., p. 633; 148 I.C.C., p. 743; 156 I.C.C., p. 117; 183 I.C.C., p. 611; 205 I.C.C., p. 273; 215 I.C.C., p. 281; 234 I.C.C., p. 247; 235 I.C.C., p. 255; 256 I.C.C., p. 649.

is much higher and more varied. Whenever cheap water transportation is available, it tends to pull even raw material-, fuel-, power-oriented industries toward major marketing areas. Markets have proved to be the most powerful attractive force in the location of modern industry, and it has been impossible for any region to obtain a diversified industrial pattern in the absence of large markets within the region. The two phenomena, of course, grow up together and mutually forward the progress of each other. An advanced stage of development of industrial diversification and markets is the evidence of a mature industrial economy.

Railroads have two major objectives with regard to the economic growth of the region which they serve: generally, they favor the development of industries that will create traffic; and particularly, they encourage the development—as regards both type and location—of industries that will contribute to a balanced traffic. They will always seek the development of those industries which, under given circumstances—the stage of a region's growth, its available and potential resources, existing markets within and without the region, and competitive factors—seem most likely to serve the major objectives just indicated. They have commonly granted relatively low rates in order to encourage the initiation and development of such industries; they have usually held up rates on non-competitive traffic and on commodities whose production does not appear likely to be stimulated by rate concessions; they may seek to maintain high interterritorial rates on competing commodities from other regions. Thus they subsidize and "protect" infant and other home industries, and also transfer part of the costs of such protection to other groups in the region. Railroad rate policies inevitably change with the development of a region. The growth of population and income increases the importance of regional markets; and railroads become more concerned with the potentialities of market-oriented industries, and less, relatively, with resource-oriented ones. Rate structures tend to be "revised" along these lines.

The history of Southern rate development, in so far as Southern railroads have been able to control their own rates, has been strongly marked by such protective policies as those just discussed. The protective elements in the Southern rate structure at the time of the present investigation appear to have been: first, the relatively low intraterritorial rates on raw materials shipped to Southern factories in such industries as iron and steel, fertilizer, lumber, and paper, and on Southern manufactured products generally; second, the relatively low interterritorial rates on such Southern manufactures as cigarettes and tobacco products, boots and shoes, and some aluminum products; third, the relatively high interterritorial rates on some Southern raw materials or semi-processed commodities, such as on unmanufactured tobacco which gives additional protection to Southern manufactured tobacco products; fourth, low interterritorial rates on raw materials and supplies from the North to the South as in the vegetable canning industry; and fifth, the high interterritorial class rates applied primarily to shipments of Northern manufactures into the South.[42]

[42] See Table III, *supra*.

A large portion of Southern products of manufacture, agriculture, and horticulture normally moves to Northern markets by relatively low water, rail-water, rail-water-rail, and motor-water rates. Such is the case with textiles, lumber and lumber products, pulpwood, paper and paperboard products, cotton, citrus fruits, and chemicals. Probably 75 per cent or more of Southern textiles have moved in this fashion. The railroad textile rate, however, has been one of the most important of the Southern rates. Substantially all textiles shipped by rail have paid commodity rates. In general, equalization between Southern and New England rates has been the basis of rate-making policy. The key rates in the adjustment between East and South have long been the Boston–Chicago and the Atlanta–Chicago rates. They were brought into equality—50 cents per hundred pounds for cotton piece goods—in 1892, increased in 1901 to 55 cents where both remained until 1915. The years following 1915 witnessed a series of rate advances affecting both rates, but increasing the Boston–Chicago rate more than the Atlanta–Chicago rate until in 1930 the Boston rate stood at $1.06 and the Atlanta rate at 83 cents. Strong objections by New England shippers secured reductions in the Boston rate to 86 cents by 1935. In that year the Commission required that the spread between Eastern and Southern rates be somewhat widened. All Southern and Eastern textile rail rates have been built pretty much around these two key rates, and have changed from time to time in conformity with variations in them. Under the resulting rate adjustment as indicated, Southern manufacturing establishments have increased in number and expanded operations steadily until they have built up a dominant position in most of the Northern markets, especially in the great markets of the Middle West where they supply two-thirds to three-fourths of the total. Since 1915 Southern shippers have continuously enjoyed lower absolute rates, though they have averaged somewhat higher on a mileage basis. In 1930 when the Atlanta differential under Boston reached its widest dimensions, Southern and Eastern textile railroad rates approximated mileage parity. As indicated by Table IX, textile rail rates from the South today average somewhat higher on a mileage basis, but they are lower in absolute quantities in most cases.[43]

How will the increase in Official intraterritorial class rates and the reduction of interterritorial and Southern intraterritorial class rates affect the competitive positions of Northern and Southern producers? Since it is Northern producers, primarily, who now pay class rates, their costs of shipping will be increased within their own territory and decreased on shipments into the South. Southern producers who ship on class rates will have their shipping costs lowered on shipments to both northern and southern markets, but the reduction within the South will be offset by the reduction of their Northern competitors' rates to the South. The position of Southern producers who now enjoy commodity, exception, and motor carrier rates—which appears to include most of them—will be worsened in the South, and improved in Northern markets only to the amount of the

[43] 211 I.C.C., pp. 692–800: reviews the history of textile rates and outlines the basis of the present adjustment.

Official territory increase. Furthermore, it would appear that the reductions may have mixed effects upon the growth of new industries in the South. The greatest hope for such acquisitions seems to lie in the direction of market-oriented industries. Rate reductions which permit freer access to Southern markets from outside sources may deter the development of such new industries, and this disadvantage might not be wholly offset by the reduced interterritorial rates to Northern markets, since to reach the latter, Southern producers would still have to overcome distance and other factors favorable to their competitors located nearer the markets. However, such adverse effects are not likely to retard the development of market-oriented Southern industries perceptibly, because railroad rates are usually not the controlling factor in the location and growth of such industries.

Northern manufacturers have been establishing branch plants in the South for many decades. At first the primary object was the supplying of their Northern finishing plants or Northern markets. Gradually they have tended to do more finishing in the South, and to establish more plants for the purpose of supplying the growing Southern market. This trend will undoubtedly continue, though the lowering of interterritorial class rates may retard it somewhat, because it will lower the costs of supplying southern trade from Northern factories. On the other hand, Northern manufacturers with established marketing organizations may find the interterritorial class rate reduction an inducement to establish branch plants in the South from which to supply some of their northern markets. Thus some capital growth, which otherwise might take place in the North, may be transferred to the South. This latter type of decentralization appears more likely than does the growth of new independent Southern establishments with Northern market outlets.

The New England region may be the most seriously affected of any by the rate changes. In the first place, because of the nature of its manufactured products, it probably pays class rates on a higher proportion of its traffic than does any other region. Furthermore, it has enjoyed a relative differential under most of the rest of Official territory on interterritorial class rates to the South. This has offset in considerable measure its distance disadvantage. The establishment of uniform rates will re-establish this disadvantage. The increase of ten or fifteen per cent in class rates in Official territory will increase its costs absolutely in that area; and the decrease in interterritorial rates will increase even more its relative costs in competition with Southern producers. It is in competition with New England sellers in Northern markets that Southern producers probably will derive most benefit from the reduction in interterritorial class rates. Consequently, some New England manufacturers may be induced to transfer all or part of their operations to the South. The inducement will be especially strong if they already possess established markets in the South or are contemplating developing them.

There has been considerable Southern opposition, not emanating from railroad groups, to class-rate reductions. Whether the opposition stems from the conviction that the costs of hauling class-rated traffic are higher, and the costs of

hauling raw materials and semi-processed goods are lower, in the South than in the North, or from the belief that the Commission's theory of costs and its policy of uniformity are unsound, or from the fear that the lowering of class rates may lead eventually to the raising of certain commodity rates, the author will not attempt to say; but these issues will be discussed briefly in terms of economic policy.

A decline in Southern railroad revenues might necessitate an increase in particular commodity rates, since an increase in all Southern rates would upset the uniformity of class rates in the country at large. The recent forced reductions of Southern intrastate passenger fares below the level of interstate fares will doubtless increase the losses on passenger service, and may very well force some compensating adjustment in freight rates. It is also quite certain that the Commission soon will undertake further extensive commodity rate investigations. Its recent strong leaning toward interterritorial parity or near parity in commodity rates, plus its emphasis on the similarity of costs between Eastern and Southern territories, suggests the probability of some revamping of Southern commodity rates. There is also evidence that they incline to the view that the extremely wide spread in rate levels as typified by the present Southern structure is not justified by cost differences. On the other hand, certain factors argue against any drastic changes in Southern commodity rates. The Commission is on record that they think a considerable number of commodity rates must be determined on bases other than those of class-rate policy. Furthermore, the Commission's staff estimated that the average of all Southern rates before the class rate reduction was 3 to 5 per cent above Official, whereas costs were approximately the same. Furthermore, it is conceivable that with continued Southern industrial growth and resulting increase of traffic, railroad costs may decline somewhat further, especially if some effective urban planning is carried out in the South. Possibly some Southern industries have passed the stage where they need to be protected by low rates; possibly an increase of such rates and a reduction of rates affecting larger groups of the Southern population would tend to increase Southern income and provide a distribution of income better designed to forward the future development of the South. The future economic interest of the South is likely to center increasingly on marketing and market-oriented industries. A better integrated rate structure seems likely to forward the establishment of broader bases for such developments. The importance of railroad rates in the future of the South may even grow relatively: the South cannot build water routes into its great industrial interior; and the advantages of motor carriage over rail appear to be pretty definitly limited to the shorter distances.

Commodity rates have pioneered the industrial development of the South. It is a method of pricing that is especially suitable to rapidly developing areas and industries; they are highly flexible and permit great freedom in price adjustments; they reward innovation and pioneering initiative; as an area matures they may tend to sustain such rewards as elements of monopoly. The class-rate

structure has rather the opposite characteristics and effects. It is inflexible and unsuited to rapidly developing and changing situations; it establishes a rigid element in the price structure; but when substituted for commodity rates, or reduced to comparable levels, it tends to equalize advantages, to redistribute the gains and opportunities developed through economic progress, and to allocate them more widely and evenly, frequently benefitting small shippers who may derive little benefit from commodity rates. Commodity rates tend to seek the large shippers and areas that promise heavy traffic movements. The small shipper finds greater difficulty in securing commodity rates that are favorable to his situation, because of his small traffic bargaining power; a commodity rate structure tends to restrict him to the production and marketing pattern of his large competitor. Obviously such a pattern is likely to be more favorable to the large concern. This restraint on the small producer's freedom of enterprise may well make for socially uneconomical use of his capital and business ability. The use of commodity rates has been extensively developed in the South; thus it might be inferred that they were equally available to all. However, when thus extended they may become an extremely complicated structure with a formidable maze of competitive relationships in which the small shipper may find himself at a definite disadvantage; they may lose a considerable degree of their inherent flexibility, especially as pertains to the operations of small concerns. Primary reliance on commodity rates seems to result also in a very wide range of rates; such a structure may be suitable to the early stages of exploitation and industrialization, but it may retard further development after a certain point of growth has been reached. A structure with greater unity and a narrower amplitude may be more in line with actual differences in rail costs, and would appear to be more suitable to the later stages of the region's economic development. Rate uniformity, however, will remove only one of the small producer's disadvantages; it alone will not enable him to compete successfully with the large firm; in fact it may not even assure him permanent rate equality. So long as flexible rate adjustments are permitted—through commodity and exception rates—any given set of class rates are likely to become obsolete, because of their inherent inflexibility.

It would appear that some have exaggerated, while others have underestimated, the probable results of the class-rate decision. The immediate effects are likely to be mixed, possibly negligible; but the decision should facilitate the establishment of a more unified, better integrated, rate structure in the South; it should supply a pricing instrument that is better adapted than the present one to further economic development. Just as the design of railroad rates in the past has played such an important role in the development of the great industries which are founded upon the region's basic resources, so the new structure should play a positive role—possibly less striking—in broadening the bases of Southern production, in enhancing and evening-out incomes, and in bringing about a better balanced and more prosperous economy.

DIVERSITY IN NORTH-SOUTH WAGE DIFFERENTIALS AND IN WAGE RATES WITHIN THE SOUTH[1]

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This paper examines and compares North-South wage differentials, first, for 40-odd firms with plants in both regions and, second, for 20-odd industries. It also measures the dispersion of wage rates in the South, making comparisons between industries and between the South and the North. Finally, it investigates the wide variations in occupational wage rates for Southern textile mills in the same labor markets.

So diverse are wage rates and wage practices that each industry enjoys its own peculiar pattern of geographical wage differentials. Many factors help to explain the variety of geographical wage patterns to be found in this country. Companies follow divergent wage policies and practices; methods of payment differ, sometimes including perquisites and employee benefits of various sorts; the composition of the labor force of companies varies as to age, sex, race, and skill; plants are located in communities of varying size; job contents or requirements differ from shop to shop; and so forth.

In this paper, which is primarily concerned with statistics and measurements, it is necessary to attempt to eliminate, or at least to minimize, any wage differences due to differences in methods of payment, in composition of the labor force, or in job contents. In the absence of national homogeneity of jobs through standardized job requirements and workloads, it is impossible of course, to separate completely differences in wages from differences in job content[2] and in workloads. Such difficulties have been partly overcome in preparing this paper by asking companies with plants in various areas and regions to state their wage differentials for comparable jobs and by relying, in large part, upon statistics of common-labor entrance rates for adult male workers.

In attempting to compare geographical wage differences, the matter of measures of typicalness also presents a problem. The appropriate measure of typicalness in wage data is peculiarly difficult because of the lack of bell-shaped distributions and well-defined concentration in much of the regional wage data, even where the jobs are all fairly comparable. After some experimentation it was decided to use the arithmetic average despite its limitations for the purpose. It has the advantage that it is simple and easy to comprehend.

I

In order to obtain information on the wage policies of firms with one or more plants in the South and the North, questionnaires were sent in January and

[1] This paper is part of a general study of wages in Southern industry, for which financial support has been provided by the General Education Board. The U. S. Bureau of Labor Statistics, particularly the Atlanta Office, has been helpful in supplying special tabulations.

[2] Job content includes the various duties and responsibilities that are assigned to workers with a certain job title in that plant.

February, 1945, to 112 such interregional concerns. Sixty replies were received, of which 48 specifically answered the question on wage policy and 46 gave adequate data on differentials in wage rates between their Northern and Southern plants for comparable jobs.

With regard to wage policy, 30 of the 48 interregional firms stated that it was their practice to pay the prevailing wage rates in the locality. Three of the 30 said they paid the local prevailing rates for their industry. Of these 30 interregional firms, four are in cotton textiles; three are in rubber, three in paper and pulp, three in oil, three in chemicals, and three in foods; two are in cement, two in other building materials, and two in hosiery; and each of the following industries is represented by one firm: furniture, plywood, clothing, metal containers, and cast iron pipe.

Eight interregional concerns replying to the questionnaire stated that their policy is to pay wages somewhat higher ("5 per cent higher," "10 per cent higher," etc.) than local prevailing rates,[3] but with the differential measured from wage rates in the locality. This group is composed of three cotton textile firms, two paper and pulp companies, and one each in aircraft, foods, and paints.

It is the practice of six replying companies to disregard wage differentials between localities and to pay the same wage rates in their Southern plants as in their Northern plants. These concerns following a wage policy of uniform national rates are distributed one in each of six industries: autos, aircraft, glass, furniture, textiles, and shoes.

Of the remaining four interregional firms, two stated that they followed a policy of paying wages sufficient to attract and hold the type of employee they required, and the other two stated they paid as high as the National War Labor Board would permit in the labor markets where their plants were located.

The replies on wage policy indicate that most interregional firms (42 out of 48 in this sample) base their wage rates on those prevailing in the area where the plant is located. Only a small minority of interregional firms (six out of 48 in this sample) follow the policy of uniform rates throughout the country regardless of differentials between localities. Nevertheless the differences between the three types of wage policy (local rates, above local rates, and national uniformity) are an important factor in explaining wage diversity in the South and in accounting for the lack of uniformity in North-South wage differentials between firms in the same industry and in similar circumstances or localities.[4]

The variations in the North-South wage differential for 46 interregional concerns are indicated in Table I, which gives the average differential for all com-

[3] Other phrases used were "slightly higher," "somewhat higher," "well above," "5% above," and "10% above."

[4] An interregional firm may, of course, have different policies with regard to geographical wage differentials in its various plants within a region. A panel of the National War Labor Board found in the steel industry that "some of the plants in which a geographical differential exists are affiliated with companies which have other plants in the same or different areas in which differentials do not exist." *Report of the Steel Panel in re: United States Steel Corporation, et al and United Steelworkers of America, CIO*, Case 111-6230-D (14-1, et al), dated September 9, 1944, footnote 13, p. 197 (mimeographed).

parable jobs in the Northern and Southern plants of the same concern. These data indicate that for interregional firms the North-South wage differential is especially large for those in the food, rubber, and full-fashioned hosiery industries and tends to be comparatively small for the oil, auto, aircraft, and paper and pulp industries.

The contrast is especially marked between such related industries as autos, aircraft, oil, and rubber. The average percentage differential for all comparable jobs in the Northern and Southern plants of the replying firms is about three times as great for rubber as it is for oil or for autos and aircraft, despite the fact

TABLE I

NORTH-SOUTH WAGE DIFFERENTIAL FOR 46 INTERREGIONAL CONCERNS

INDUSTRY	NUMBER OF FIRMS	SOUTHERN COMPARED WITH NORTHERN RATES, BY FIRM
Cotton textiles	8	1 slightly higher in South, 3 South 10% lower, 1 South 14% lower, 1 South 15% lower, 1 South 16% lower, and 1 South 20% lower
Paper and pulp	5	1 South 5 to 10% higher, 2 South lower except for skilled rates, 1 South 17% lower, 1 South 21% lower
Autos, aircraft, and construction equipment	4	2 same, 1 South 5% lower, 1 South 19% lower
Rubber	3	1 South 20% lower, 1 South 25% lower, 1 South much lower (more than 25% lower)
Oil	3	1 South slightly lower, 1 South 7.2% lower, 1 South 9% lower
Furniture and plywood	3	1 same, 2 South 10% lower
Shoes and clothing	3	1 same, 1 South 10% lower, 1 South 15% lower
Hosiery	2	1 South 21% lower, 1 South 20 to 25% lower
Food	4	1 South 10% lower, 1 South 15 to 20% lower, 1 South 28% lower, and 1 South 30% lower
Chemicals	2	1 South slightly lower, 1 South 20% lower
Metals	3	1 South lower, 1 South about 15% lower, 1 South 22% lower
Cement	2	1 South 7% lower, 1 South 14% lower
Other building materials	4	1 same, 1 South 13% lower, 1 South 15% lower, 1 South 20 to 25% lower

that two of the "big four" rubber companies are also engaged in aircraft production.

The wide range in the North-South differential for firms in the textile, paper and pulp, and aircraft industries is, in part, to be explained by the location of their plants and the character of their products. The textile company paying slightly higher wages in the South than in the North is mainly in rayon textiles. The Southern plants of the firms with the largest percentage differential in the textile, aircraft, and paper and pulp industries are located in rather small communities in South Carolina and Georgia. The extreme range in the paper and pulp industry (from South 5 to 10 per cent higher in one firm to South 21 per cent lower in another firm) cannot, however, be explained simply in terms of location and products but is partly due to differences in wage and management policies.

The principal conclusion of this section is that differences in wage and management policies of firms help to explain the wide range in North-South differentials.

II

Comparison of regional wage differentials is continued in this section. Most of the comparisons are based on statistics of entrance rates for adult male common labor, compiled by the U. S. Bureau of Labor Statistics for the years 1936 through 1942.[5]

For comparing wage levels among different industries and between different regions, common-labor entrance rates have certain advantages. Common-labor jobs[6] in most industries are fairly uniform in their low requirements of experience and responsibility. Perhaps common laborers in the fertilizer industry are not identical, as a group, with common laborers in petroleum refining, where entrance rates for common labor have been almost twice as high as in fertilizer. Nevertheless, more than is true of any other general job category, differences in entrance rates for adult male common labor are due primarily to factors other than differences in skill, training, or ability of workers. Furthermore, entrance rates for common labor reflect fairly accurately the minimum level of pay of an important group in entire industries and frequently serve as one of the bases upon which the wage structure of an industry is founded. The common-labor entrance rate is also a particularly stable and uniform one as it is not affected by incentive-payment systems, seniority or merit-advancement plans, and similar factors causing wage-rate variability within an occupation.

Southern differentials in common-labor rates for 13 industries are set forth in Table II. In the first column for each year are the averages for the South and Southwest states[7] expressed as percentages of the corresponding averages for the North and Western states. In the second column, the industry average for the South and Southwest states has been divided by the average for the country as a whole to give a South-U. S. ratio for each industry. Naturally the South-U. S. percentage is greater than the South-North percentage. The difference between the two ratios for an industry in any one year is small, however, except for the fertilizer and lumber industries. Most of the fertilizer industry is located in the South, and the South accounts for about two-fifths of the nation's lumber production.

[5] The Bureau's data for those years were obtained by mail questionnaire from 5,000 to 8,000 establishments with from 150,000 to 280,000 common laborers at entrance rates. Beginning in 1943, the nature of the annual survey of common-labor rates was changed, being confined to cities of 100,000 or more inhabitants and obtained by actual plant visits. Until 1938, Delaware, Maryland, D. C., and West Virginia were included in the South; thereafter they were included in the North but New Mexico and Arizona were added to the Southwest.

[6] Common laborers were defined to include workers "who perform physical or manual labor of a general character and simple nature, requiring no special training, judgment, or skill." Apprentices, learners, machine operators, and other workers with distinct occupational titles, such as helpers, truckers, or watchmen, were excluded.

[7] Consisting of 17 states in 1936 and 1937 and of 15 states thereafter. For a list of the states included in the South and Southwest see Table V.

TABLE II

SOUTHERN DIFFERENTIAL IN COMMON-LABOR ENTRANCE RATES FOR 13 INDUSTRIES, SOUTHERN AVERAGE AS PERCENTAGE OF NORTHERN AVERAGE AND U. S. AVERAGE, JULY OF EACH YEAR[a]

INDUSTRY	1936		1937		1938		1939		1940		1941		1942	
	S-N	S-U. S.	S-N	S-U. S.	S-N	S-U. S.	S-N	S-U. S.	S-N	S-U. S.	S-N	S-U. S.	S-N	S-U. S.
Brick, tile and terra cotta	68.4%	73.1%	65.9%	69.8%	60.0%	63.6%	59.3%	65.1%	61.9%	67.0%	61.4%	67.3%	63.8%	72.4%
Cement	72.9	78.9	74.9	80.5	72.6	77.6	71.6	77.2	76.1	81.8	75.4	80.5	80.3	84.8
Chemicals	68.8	76.9	74.4	83.3	61.0	69.1	64.6	72.3	61.1	67.1	65.6	70.0	64.7	70.0
Fertilizer	65.8	86.5	51.8	76.7	57.7	75.2	63.7	81.8	64.6	85.3	60.6	84.4	65.1	84.6
Foundry and machine-shop	84.0	85.4	75.2	76.8	68.7	70.9	67.1	69.0	67.6	70.2	67.4	69.8	68.5	72.4
Glass	97.5	98.0	95.3	96.2	82.4	83.0	77.1	78.8	82.5	83.7	81.0	82.2	82.5	83.8
Iron and steel	86.4	87.6	89.8	91.3	73.4	75.4	73.8	76.0	72.1	73.9	79.0	80.4	73.4	75.4
Leather	81.1	85.3	76.8	81.1	77.0	79.0	75.7	78.4	78.4	80.8	71.2	74.8	86.1	87.3
Lumber (sawmills)	48.4	59.0	44.9	56.1	44.1	58.9	48.7	69.3	55.8	75.3	50.7	72.3	56.5	82.5
Paints and varnishes	83.1	84.6	73.6	74.6	61.4	63.7	63.7	66.2	66.0	68.4	65.6	67.5	65.9	67.6
Paper and pulp	78.3	82.3	77.5	83.0	77.2	81.7	77.4	83.1	78.4	84.3	82.8	87.4	89.7	92.6
Petroleum refining	86.1	92.4	87.7	92.1	84.6	90.1	84.9	89.9	85.9	91.0	81.7	88.6	72.4	82.4
Slaughtering and meat-packing	76.1	78.1	81.4	83.6	84.9	87.3	73.9	75.7	70.3	72.5	69.9	71.7	77.4	80.0
Average	76.7	82.2	74.5	82.1	69.6	75.6	69.3	80.4	70.8	77.0	70.2	76.7	72.8	79.7

[a] Sources of data: *Monthly Labor Review* XLIV (April 1937), pp. 938–52; XLV (December 1937), pp. 1491–1510; XLVIII (January 1939), pp. 162–75; XLIX (December 1939), pp. 1450–65; LII (January 1941), pp. 1–23; LIV (January 1942), pp. 149–73; and LVI (February 1943), pp. 313–28.

The South-North and South-U. S. differentials for common labor have been relatively small for petroleum refining (the South averaging 17 per cent below the North and the South-U. S. differential averaging 10 per cent), for the glass industry (averaging 14 and 13 per cent), and for paper and pulp (averaging 20 and 15 per cent). Those differentials have generally been large for the lumber industry (averaging 50 and 32 per cent), for the brick, tile, and terra cotta industry (averaging 37 and 32 per cent), and for the fertilizer industry where the South has averaged about 38 per cent below the North during the seven years from 1936 through 1942. For some industries (cement, sawmills, and paper and pulp), the South-North and South-U. S. differentials narrowed significantly between 1936 and 1942. For other industries (foundry and machine-shop products, paints and varnishes, and iron and steel), the common-labor differentials in Table II increased considerably during that period.

In general, the industries paying the lowest common-labor entrance rates in the South (like lumber, fertilizer, and brick, tile, and terra cotta, averaging 27.8 cents, 30.1 cents, and 31.3 cents an hour respectively for those years) had the largest South-North differentials, and industries paying the highest common-labor rates in the South, like petroleum refining (averaging 56.7 cents per hour) and glass production (averaging 45.0 cents per hour), generally had the narrowest South-North differentials. Iron and steel, with an average of 48.0 cents an hour, is an exception.[8]

The close correlation between actual wage rates paid in the South and the South-North wage differential is further indicated by direct comparison of the 13 industries for each of the seven years. They were ranked twice for each year seriation from 1 to 13 (from the highest to the lowest hourly wage and from the smallest to the largest South-North differential). Out of 91 cases, the rank was the same for actual wages and for South-North differential in 26 cases: the two rankings for each industry differed by only one rank in 25 cases, and they differed by only two ranks in 17 cases. In other words, in 68 out of 91 cases the rank for an industry was the same or nearly the same for actual wages paid in the South and for the South-North differential.[9]

The 1943 statistics of entrance rates for common labor, obtained by plant visits, include some additional industries, are confined to major industries in cities of 100,000 or more inhabitants, and are broken down for nine Southeastern and six Southwestern states.[10] An analysis of the 1943 data indicates that the average differential for 12 industries is approximately the same for the Southeast as for the Southwest (73.9 and 72.3 per cent respectively); yet the rank of a

[8] The other industries with relatively high average entrance rates for common labor in the South were: slaughtering and meat packing with 44.9 cents, cement with 43.1 cents, and paper and pulp with 42.5 cents, as an hourly average for the period.

[9] The correspondence is not quite so close between the rank in terms of Southern wages and the rank in terms of the size of the South-U. S. differential. Out of 91 cases, the rankings were the same in 17 instances, differed by only one rank in 27 instances, differed by 2 ranks in 16 instances, and by 3 ranks in 10 instances.

[10] See *Monthly Labor Review*, LVIII (April 1944), pp. 804–15. The 6 Southwestern states are: Arizona, Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

majority of the industries is markedly different in the Southeast from that in the Southwest. Chemicals and allied products and building construction have the lowest Southwest-U. S. ratios (60.4 and 67.8 per cent respectively), while food and kindred products and lumber have the smallest Southeast-U. S. ratios (61.3 and 65.8 per cent). The greatest wage differential for common labor between the Southeast and the rest of the country appears to be in industries close to agriculture like food processing and lumbering.

Differentials for unskilled labor are presented for 5 additional industries (along with meat-packing and iron and steel) in Table III. Iron and steel and meat packing ranked in the middle of the 13 industries in Table II.[10a] The Southern wage differential for unskilled workers in Table III is greatest (the stated percentage is smallest) for the furniture, iron and steel, meat-packing, and full-fashioned hosiery industries. The differential is relatively smaller for cotton textiles, knitted underwear, and seamless hosiery, which are generally low-wage industries. However, their wage levels for unskilled labor in the South were no lower than the level being paid by the wood household-furniture industry or the full-fashioned hosiery industry.

The relatively large Southern differential for "laborers" in cotton textiles in Table III is partly to be explained by the fact that over four-fifths of the workers in that category in the South were Negroes and the average hourly earnings of Negro "laborers" were 10 per cent below those for white "laborers" in the South.[11] Approximately one-fifth of the male scrubbers and sweepers in the Southern textile mills at the time of the 1937 survey were also colored and their average hourly earnings were likewise approximately 10 per cent below those for white male scrubbers and sweepers.[12]

In contrast to the industries in Table III are certain high-wage industries, automobiles and aircraft in particular. Firms in those two industries were paying common labor rates of 75, 85, and 89 cents an hour in the South in 1944. Some of them have been paying the same scale of rates in the South as they pay in the North. That has been true, for example, of the Ford Motor Company and some aircraft concerns. Consequently, the average entrance rate for male common labor in automobiles as reported by the U. S. Bureau of Labor Statistics for July, 1932, is 75 cents an hour for the South Central states[13] compared with a national average of 62 cents.[14] General application in the South of the Southern California Aircraft Industry wage rates explains why, in its 1943 survey of hourly earnings in the airframe industry, the U. S. Bureau of Labor Statistics

[10a] Their average rank for South-North and South-U. S. ratios in Table II was 5 and 6 from the top (representing the smallest differential).

[11] There were no Negro "laborers" in the North. See A. F. Hinrichs. *Wages in Cotton-Goods Manufacturing*, U. S. Bureau of Labor Statistics Bulletin No. 663, 1938, p. 90.

[12] *Ibid.*, p. 89.

[13] Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, and Texas.

[14] Presumably only one firm reported for the South as the same figure is given for high, low, and average. The automobile common-labor rate was only reported for 1932 and 1933 for the South. See *Monthly Labor Review*, XXXV (October 1932), p. 918, and XXXVII (October 1933), p. 935.

states: "No separate figures are shown for the South, since the wage levels found in the small number of Southern plants do not differ materially from those found in Northern plants."[15]

TABLE III

SOUTHERN WAGE-DIFFERENTIAL FOR UNSKILLED WORKERS IN 7 INDUSTRIES, 1937 AND 1938[a]

INDUSTRIES AND OCCUPATIONS	AVERAGE SOUTHERN WAGE IN % OF NORTHERN AVERAGE	AVERAGE SOUTHERN WAGE IN % OF U. S. AVERAGE	AVERAGE HOURLY WAGE IN SOUTH
Cotton textiles (April 1937)			
all unskilled males	84.9%	98.2%	37.6 cents
all unskilled females	79.4	92.7	30.4
sweepers and scrubbers (male)	73.3	93.6	27.5
laborers	59.7	86.8	25.5
Wood household furniture (October 1937)			
all unskilled workers	64.5	74.3	26.9
janitors and sweepers	65.2	77.1	28.5
laborers, general	69.2	77.5	27.3
Meat packing (December 1937)			
all unskilled workers	70.8	73.3	43.0
Iron and steel (April 1938)			
unskilled workers, all branches	69.6	71.0	48.9
unskilled workers, rolling mills	69.7	70.8	49.4
Knitted underwear (Aug.-Sept. 1938)			
all unskilled males	74.2	80.1	29.3
all unskilled females	87.2	89.9	23.9
Seamless hosiery (September 1938)			
all unskilled males	73.9	93.8	28.6
all unskilled females	81.3	95.0	28.3
Full-fashioned hosiery (September 1938)			
all unskilled males	65.2	75.6	28.5
all unskilled females	71.5	78.8	29.8
janitors and cleaners	67.6	79.3	28.4

[a] Sources of data: U. S. Bureau of Labor Statistics, *Bulletin No. 663*, 1938, pp. 95, 97; *Bulletin No. 669*, 1940, p. 73; *Monthly Labor Review* XLIX (October 1939), p. 943; *Monthly Labor Review* LI (August 1940), p. 436; *Monthly Labor Review* XLIX (November 1939), p. 1183; *Monthly Labor Review* XLVIII (June 1939), pp. 1393; and *Monthly Labor Review* XLVIII (May 1939), pp. 1153, 1159.

In addition to some automobile and aircraft firms, the Federal Government also pays the same wage rates to regular Federal employees in the South as it

[15] *Monthly Labor Review*, LVIII (May 1944), p. 1053.

pays in other sections of the country. In bituminous coal, the day-rate workers[16] have, since June 1941, received the same rates in the South as in the North, although North-South differentials continued to exist for miners paid by tonnage rate.

Table II shows the Southern differential for common labor to be relatively small in paper and pulp in 1942. According to a recent study, the level of wage rates paid to unskilled, semi-skilled, and skilled labor by paper and pulp mills in the South in November 1939 was approximately the same as the average level for the North.[17] The average wage level for 27 Southern mills was above that for mills in New York, Indiana, and three New England states. The higher rates generally paid for skilled labor in the South tended to offset the uniformly lower rates paid in the South for common labor. The Southern states themselves varied widely in rank—from Texas, third from the top, to South Carolina, the lowest state of the 32.[18]

One high-wage industry that has a large South-North wage differential is the rubber industry. A survey of 32 rubber tire and tube plants (three in the South) in August 1942 showed the Southern rates for common labor to be only about 60 per cent of the average for the country as a whole; Southern rates for skilled mechanics were only about 85 per cent of the U. S. average.[19] For most occupations in the tire and tube industry, the Southern rates were from 60 to 75 per cent of the U. S. average, with 65 per cent probably representing a fair average for all occupations combined.[20]

There seems to be no satisfactory explanation of the large South-U. S. wage differential in rubber tire and tube processing, in view of the small differentials, if any, in automobiles, aircraft, petroleum, paper and pulp, and the metal trades. The especially large South-U. S. differential for common labor in tire and tube processing has undoubtedly been due in part to the use of colored labor for such jobs in the South.[21]

[16] Day-rate workers generally work on the surface, handle hoists and timber, lay track, etc. They represent about one-sixth of the labor cost in bituminous coal production.

[17] See W. Rupert Maclaurin, "Wages and Profits in the Paper Industry, 1929-1939," *Quarterly Journal of Economics* LVIII (February 1944), Table IX, p. 218. The average of the mean average ratings for the 11 Southern states was 5.44 compared with 5.18 for the 18 Northern states with 235 mills (excluding the Pacific Coast).

[18] The 11 Southern states ranked as follows from the top: third, seventh, eleventh, thirteenth, nineteenth, twenty-third, twenty-fourth, twenty-sixth, twenty-eighth, thirtieth, and thirty-second.

[19] Based on average hourly earnings for male laborers and janitors and for electricians, millwrights, and pipefitters. See *Wages in Rubber Manufacturing, August 1942*, Bulletin No. 737, U. S. Bureau of Labor Statistics, 1943, p. 16.

The corresponding figures for the same occupations in the paperboard industry in November–December, 1939, are approximately 80 per cent for common labor and 98 per cent for the skilled trades. See *Earnings and Hours in the Paperboard Industry*, Bulletin No. 692, 1941, pp. 14–15, 18–19.

[20] On the basis of South-U. S. ratios calculated from data on p. 21 as well as pp. 13–17 of *Bulletin No. 737*.

[21] In one of the 3 Southern plants there was a differential between colored and white workers for comparable work amounting to perhaps 20 cents in 1944. Colored janitors,

From the various data in this section, the following conclusions can be drawn:

1. South-North and South-U. S. wage differentials vary from industry to industry and for the same industry from one period to another. For some industries, like food, lumber, and rubber, the Southern differential has been large. For other industries, like petroleum refining, paper and pulp, and seamless hosiery, it has been small. For some firms (in aircraft, autos, etc.) and for the Federal Government there is no South-North wage differential.

2. In some industries, the size of the Southern wage differential differs considerably from state to state, wage levels for the paper industry in four Southern states being above the average level for the North.

3. The pattern of South-North and South-U. S. wage differentials in the Southeast appears to differ in many respects from that for the Southwest.

4. With some exceptions (like iron and steel and rubber), the Southern wage differential tends to be relatively small in industries paying the highest level of wages for common labor in the South.

III

From a statistical study of entrance rates for common labor between 1926 and 1937, Dr. Carrie Glasser concludes that Northern wage rates have been consistently and considerably more uniform than Southern wage rates.[22] Dr. Glasser argues that, along with lack of unionism, absence of state labor legislation, racial discrimination, and so forth, a basic factor making for greater wage dispersion in the South is the decentralization of Southern industry.[23]

In this section the variability of Southern and Northern wage rates will be examined in detail. The basic data used will consist principally of the entrance rates for adult male common labor in 13 industries for the years 1936 through 1942. The advantages of such common-labor rates for inter-industry and interregional comparisons were explained at the beginning of the preceding section.[24]

As a comparative measure of wage variability, the coefficient of average deviation will be used. It is computed by averaging the deviations from the arithmetic mean and then dividing that average deviation by the mean from which the deviations were measured. By so expressing the average deviation as a coefficient (in relative or percentage terms) it is possible to compare wage dispersion or variation between industries and between regions.

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engineering helpers, and storage workers were receiving 54 to 56 cents per hour, whereas the lowest paid white workers in the plant were receiving 75 cents an hour for a common-labor job, and white hand truckers, who were dispatched, were being paid 84 cents an hour.

[22] *Wage Differentials, The Case of the Unskilled*, 1940, pp. 111, 112.

[23] Data are offered showing that, whereas 73 per cent of all wage jobs in New England were in "major industrial counties" (regions of highly concentrated manufacturing activity) in 1933, only 14 per cent of all wage jobs in the South were then in such major industrial counties, 58 per cent of them being in relatively scattered small towns and outlying communities. See *ibid.*, pp. 158, 162.

[24] The source and nature of the data on common-labor entrance rates were also explained in the preceding section.

The first comparison is that for 13 manufacturing industries.[25] The coefficients in Table IV have been computed on the basis of the variations of the average entrance rate for each industry from the average for all 13 industries.

Even with the shift in states included in the South after 1937, the coefficient of variation for the South is 1½ to 2 times that for the North. The reduction in the variation of common-labor entrance rates between these 13 industries in the South after 1938 undoubtedly is due largely to the establishment of a statutory

TABLE IV

WAGE VARIATION BETWEEN THE REGIONAL AVERAGES FOR COMMON LABOR IN 13 INDUSTRIES (AS MEASURED BY COEFFICIENTS OF AVERAGE DEVIATION), JULY OF EACH YEAR[a]

ALL MALE WORKERS	1936	1937	1938	1939	1940	1941	1942
32 and 34 Northern and Western States...	6.6%	6.6%	7.6%	8.4%	8.0%	8.3%	9.0%
17 and 15 Southern and Southwestern States	15.3	17.0	18.1	13.6	13.1	13.7	14.7
WHITE WORKERS ONLY							
32 and 34 Northern and Western States...	—	—	—	—	6.6	8.0	9.3
17 and 15 Southern and Southwestern States	—	—	—	—	14.4	15.8	14.1

[a] Sources of data are the same as for Table II.

TABLE V

WAGE VARIATIONS BETWEEN STATE AVERAGES FOR COMMON LABOR IN MANUFACTURING, UTILITIES, AND CONSTRUCTION (AS MEASURED BY COEFFICIENTS OF AVERAGE DEVIATION), JULY OF EACH YEAR[a]

	1936	WHITE ONLY 1936	1937	WHITE ONLY 1937	1938	1939	1940	1941	1942
34 Northern and Western States	6.2%	6.4%	8.0%	7.0%	6.9%	7.0%	7.7%	8.3%	11.0%
15 Southern and Southwestern States[c]	15.1	8.3	15.5	14.5	15.7	16.0	10.5	12.0	11.3
11 Southern States[b]	8.9	5.5	12.0	10.7	15.6	10.8	7.3	10.3	7.7

[a] Sources: Same as for Table II.

[b] Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Tennessee, Texas, and Virginia.

[c] The above 11 states plus Arizona, Kentucky, New Mexico, and Oklahoma.

minimum of 25 cents per hour in October 1938 and 30 cents per hour in October 1939 under the Fair Labor Standards Act of 1938. The greater coefficients for white workers in the South in 1940 and 1941[26] seem to indicate that racial factors are not a significant part of the explanation of wide wage dispersion between these 13 industries in the South.

[25] The 13 industries are listed in Table VII.

[26] Data are not available by industry with Negroes and Mexicans excluded prior to 1940.

Table V indicates that there has also been greater variation between the state averages for common-labor rates in the South than in the North. Coefficients of variation were calculated for 15 and for 11 Southern and Southwestern states on the basis of male entrance rates reported for 16 manufacturing industries,[27] three public-utility industries,[28] and building construction. In July, 1938 and 1939 the coefficient of variation was more than twice as great for the 15 Southern states as it was for the 34 Northern states. By July, 1942, however, the difference had practically vanished and the coefficient for the 11 Southern states was considerably below that for the 34 Northern states.[29] There can be little doubt that the statutory minima under the Fair Labor Standards Act and the wage minima up to 40 cents an hour, as fixed for industries under that Act, were largely responsible for the sharp decline after July, 1938, in the coefficient of variation for the 11 Southern states.

Although elimination of Negroes and Mexicans from the data had practically no effect upon the coefficients of variation on an industry basis (see Table IV), such elimination causes a marked decline in the coefficient for the South on a state basis for 1936 and a slight decline for 1937.[30] Judging by data for those

TABLE VI

VARIATION IN SOUTH-U. S. WAGE DIFFERENTIAL FOR COMMON LABOR IS 13 INDUSTRIES (AS MEASURED BY COEFFICIENTS OF AVERAGE DEVIATION), JULY OF EACH YEAR[a]

	1936	1937	1938	1939	1940	1941	1942
17 and 15 Southern and Southwestern States	7.7%	9.2%	7.7%	7.4%	9.0%	8.7%	7.8%
Southern average as percentage of U. S.	82.1	80.4	75.0	75.6	77.0	76.7	79.8

[a] Sources: Same as for Table II.

two years, lower common-labor rates for Negroes in the South seem to have a somewhat greater effect upon interstate wage variation than upon inter-industry wage variation.

Coefficients of variation in South-U. S. wage differentials for 13 manufacturing industries and the average South-U. S. differential from which the variations were measured are set forth in Table VI. Although the coefficients of variation for the states and the 13 industries (Tables IV and V) seem to follow the same

[27] Including, in addition to the 13 industries previously mentioned, 3 for which no separate rates were given for the South, i.e., automobile parts, rubber tires and tubes, and soap.

[28] Electric light and power, manufactured and natural gas, and electric street-railway and city motorbus operation and maintenance.

[29] The average from which deviations were measured was the simple average of the average rates for the states in each group.

[30] Those were the only years for which separate data for whites, excluding Mexicans, are available.

The coefficient of 5.5 per cent for 11 Southern states for 1936 in Table V includes Texas on an over-all basis since no separate white figure is given for that state. With Texas excluded the coefficient of variation for the remaining 10 Southern states is 3.4 per cent.

pattern for the South, rising from 1936 to 1938 and then declining and remaining at a much lower level from 1939 to 1942, there is no such pattern for the coefficients of variation for the South-U. S. wage differential in manufacturing industries. They are fairly steady, like the coefficients for the 34 Northern states on both an industry and a state basis. Moreover, the coefficients of variation for the South-U. S. wage differential are approximately the same magnitude as the Northern coefficients, ranging from 7.4 to 9.2 per cent compared with a range of 13.1 to 18.1 per cent for the South for the 13 manufacturing industries and a range of 11.3 to 16.0 per cent for the 15 Southern states on a state basis. In contrast to the other series for the Southern states, that for the South-U. S. differential has its peaks in 1937 and 1940 rather than in 1938 or 1939. The Fair Labor Standards Act apparently had much less influence on variations in the South-North wage differential than it did upon the uniformity of entrance rates for male common labor in the South. True the South-U. S. differential for common-labor entrance rates in 13 industries did diminish somewhat after the Fair Labor Standards Act came into effect in October 1938. However, the Southern average for the 13 manufacturing industries was approximately 20 per cent under the average for the U. S. both in July, 1942 and in July, 1937.

The variation of common-labor rates from the regional average for the industry has generally been somewhat greater in the South than in the North. That is brought out in Table VII, giving the coefficients of average deviation for each of the 13 manufacturing industries and the simple average of the coefficients for all 13 industries, for the years 1938 through 1942. In only one year (1940) was the 13-industry average of coefficients for the North equal to a similar average for the South; for all five years the average coefficient for the 13 industries was 14.9 per cent for the South and Southwest compared with 12.6 per cent for the North and West. The South had a higher coefficient of average deviation than the North in over 60 per cent (40 out of 65) of the cases. In some industries (cement, glass, petroleum refining, and slaughtering and meat packing), the coefficient of average deviation was higher for the South and Southwest in every year, and in others (chemicals and iron and steel) it was higher in every year except one. On the other hand, the coefficient was higher for the North than for the South in every year in the case of the paper and pulp industry, and in every year except one for the lumber industry.

In Table VIII coefficients of average deviation in wages are presented for three skill categories (i.e., skilled workers, semi-skilled employees, and unskilled labor) in eight industries. The basic data for the calculations have been taken from wage surveys of those industries by the U. S. Bureau of Labor Statistics. Five of these eight industries (furniture, cotton textiles, knitted underwear, seamless hosiery, and full-fashioned hosiery) have not been included in previous tables containing coefficients of variation.

For five of the eight industries, the coefficients for the South exceed those for the North in each skill category. In furniture, cotton textiles, and knitted underwear the coefficients of variation are larger for the North than for the South. The differences are not great, however, except for the semi-skilled and unskilled categories in the furniture industry.

Except for wood household furniture, there is a wide spread in the regional wage rates paid in each industry under the three categories of skill. Even for unskilled occupations, the highest rates paid in the region are two to three times the lowest rates paid (in all except the furniture industry). Most of these wage surveys were made, of course, before the Fair Labor Standards Act became effective in October, 1938. The effect of that Act upon the wage structure for unskilled furniture workers is indicated by the drop from 13.0 per cent to 4.0 per cent in the coefficient of deviation for the South between the 1937 and 1941 surveys of the furniture industry, whereas the coefficient for unskilled labor for

TABLE VII

VARIATION OF ACTUAL WAGE RATES FROM REGIONAL AVERAGE FOR COMMON LABOR IN 13 INDUSTRIES (AS MEASURED BY COEFFICIENTS OF AVERAGE DEVIATION), JULY OF EACH YEAR[a]

INDUSTRY	1938		1939		1940		1941		1962	
	Northern and Western States	Southern and Southwestern States	Northern and Western States	Southern and Southwestern States	Northern and Western States	Southern and Southwestern States	Northern and Western States	Southern and Southwestern States	Northern and Western States	Southern and Southwestern States
Brick, tile, and terra cotta	14.6%	14.3%	14.2%	16.3%	15.9%	7.7%	15.6%	15.2%	13.4%	17.6%
Cement	10.9	11.6	8.2	10.3	7.5	7.7	6.9	7.3	6.8	6.9
Chemicals	8.6	17.7	11.1	15.9	11.3	14.6	11.4	8.2	11.2	13.2
Fertilizers	15.5	29.8	16.3	21.3	16.3	12.3	17.8	12.4	18.1	15.3
Foundry and machine-shop	11.9	4.2	12.4	19.2	11.4	15.0	16.2	15.1	13.9	12.3
Glass	10.0	25.5	12.7	22.7	12.3	26.9	12.7	27.2	13.8	24.8
Iron and Steel	3.3	10.5	8.5	11.8	8.4	8.6	8.2	8.1	4.0	13.7
Leather	14.9	18.1	15.0	22.2	18.1	13.6	13.6	8.0	12.0	11.7
Lumber	17.2	17.5	18.6	4.7	17.7	7.1	18.0	9.6	26.4	5.2
Paints and varnishes	13.6	15.9	13.8	18.0	16.4	18.1	16.1	15.6	18.5	17.4
Paper and pulp	12.2	10.0	12.8	11.9	28.4	11.4	14.7	9.9	11.5	9.4
Petroleum refining	6.8	17.6	8.5	17.1	8.1	16.7	8.6	20.7	6.6	11.9
Slaughtering and meat packing	8.0	13.8	7.3	28.4	7.7	19.7	9.1	25.3	6.2	19.9
Average	11.3	15.9	12.3	16.9	13.8	13.8	13.0	14.0	12.5	13.8

[a] Sources: Same as for Table II.

the North was around 21 per cent in both years. In February, 1941, approximately 85 per cent of all unskilled workers in the furniture industry in the South were being paid wage rates from 30 to 32.5 cents per hour, and none of those covered by the survey were receiving as much as 47.5 cents an hour.

For only two of the eight industries are data available on the distribution of workers by wage rates on an occupational basis, namely, cotton textiles and paperboard. In Table IX coefficients of average deviation are presented for the occupations containing the largest number of workers.[31]

[31] In each of the 3 general categories of skill. For each occupation in each region from 108 to 8,833 workers are included in the basic data.

TABLE VIII

Wage Variations within 8 Industries by Skill (as Measured by Coefficients of Average Deviation), 1937–1941[a]

Industry and Class of Workers[b]	South[c]	North
Cotton textiles (April 1937)		
Skilled	16.6%	19.2%
Semi-skilled	15.1	17.4
Unskilled	13.8	14.5
Wood household furniture (October 1937)		
Skilled	22.4	25.8
Semi-skilled	15.6	24.8
Unskilled	13.0	21.5
Meat packing (December 1937)		
Skilled	27.6	17.1
Semi-skilled	24.1	12.9
Unskilled	22.0	11.8
Iron and steel (April 1938)		
Skilled	27.3	22.0
Semi-skilled	20.8	16.8
Unskilled	18.1	11.9
Knitted underwear (Aug.–Sept. 1938)		
Skilled	25.6	23.8
Semi-skilled	16.4	17.7
Unskilled	14.1	16.4
Seamless hosiery (September 1938)		
Skilled	14.7	14.6
Semi-skilled	22.8	18.8
Unskilled	26.8	18.5
Full-fashioned hosiery (September 1938)		
Skilled	20.9	18.9
Semi-skilled	32.9	25.2
Unskilled	27.3	24.6
Paperboard (Nov.–Dec. 1939)		
Skilled	23.2	18.4
Semi-skilled	18.5	14.0
Unskilled	12.0	11.5
Wood household furniture (February 1941)		
Skilled	22.2	26.0
Semi-skilled	13.2	22.5
Unskilled	4.0	21.0

[a] Sources: Wood household furniture (*Monthly Labor Review* LIII, September 1941, p. 746), meat packing (*Monthly Labor Review* XLIX, October 1939, p. 947), iron and steel (*Monthly Labor Review* LI, August 1940, p. 432), cotton textiles (U. S. Bureau of Labor Statistics, *Bulletin No. 663*, 1938, pp. 83, 84, 95), knitted underwear (*Monthly Labor Review* XLIX, November 1939, p. 1183), seamless hosiery (*Monthly Labor Review* XLVIII, June 1939, p. 1395–96), full-fashioned hosiery (*Monthly Labor Review* XLVIII, May 1939, p. 1156), and paperboard (U. S. Bureau of Labor Statistics, *Bulletin No. 692*, 1941, pp. 7 and 8).

[b] Confined to male workers, except for the following categories for which data for females only were used: semi-skilled workers in knitted underwear; semi-skilled and unskilled workers in seamless hosiery; and skilled, semi-skilled, and unskilled workers in full-fashioned hosiery.

[c] For paperboard, the "South" includes Maryland and West Virginia and the "North" is confined to New England and Middle Atlantic states; for meat packing, the "South" includes Oklahoma and Arizona; for furniture, the "South" includes southern Missouri and Oklahoma. The coefficients for the Mid-West in the paperboard industry are smaller than those for the Northeast.

It is interesting to find that the Southern coefficients for each of the seven important textile occupations exceeded the Northern coefficient for the same occupation by a considerable amount, although in Table VIII the Northern coefficients exceeded the Southern in all three of the general categories of skill. The Southern average of the coefficients for the seven textile occupations in Table IX is 11.8 per cent compared with a Northern average of 7.9 per cent, whereas the Southern average of coefficients for the 3 general categories in Table VIII is 15.2 per cent compared with a Northern average of 17.0 per cent. In short, the variation in cotton textile wages in the South is actually much greater than in the North, occupation by occupation, although that fact is concealed when coefficients of variation are calculated on the basis of three general categories of skill, each including a number of occupations.

TABLE IX

WAGE VARIATION WITHIN OCCUPATIONS IN COTTON TEXTILES AND PAPERBOARD INDUSTRY (AS MEASURED BY COEFFICIENTS OF AVERAGE DEVIATION), 1937 AND 1939[a]

INDUSTRY AND OCCUPATION	SOUTH	NORTHEAST
Cotton textiles (April 1937)		
Skilled		
Loomfixers (male)	9.3%	7.1%
Semi-skilled		
Doffers (male)	14.9	11.2
Frame spinners (female)	12.0	8.7
Unskilled		
Filling and battery hands (male)	9.9	5.7
Filling and battery hands (female)	8.0	4.4
Sweepers and scrubbers (male)	15.1	9.9
Laborers (male)	14.5	8.4
Paperboard (Nov.–Dec. 1939)		
Skilled		
Machine tenders	26.2	22.4
Semi-skilled		
Third hands	32.7	13.7
Unskilled		
Beater helpers	11.9	12.1
Shipping laborers	12.3	10.0
Yard laborers	8.7	10.0

[a] Sources: U. S. Bureau of Labor Statistics, *Bulletin No. 663*, pp. 100, 102; and *Bulletin No. 692*, pp. 16–19.

Whether the same would be true for the other two industries (furniture and knitted underwear) with higher Northern coefficients in Table VIII is difficult to determine in the absence of actual wage distributions on an occupational basis. Probably many occupations in knitted underwear would show greater wage variation in the South[32] but that would certainly not be true for the un-

[32] The Southern coefficient for the skilled group in Table VIII is greater than the Northern coefficient.

skilled, or even some semi-skilled, occupations in the furniture industry, where Southern rates have been bunched so near the minima under the Fair Labor Standards Act. In two of the five occupations given in Table IX for the paperboard industry, the Northern coefficients somewhat exceed the Southern coefficients, although in both Tables VIII and IX the Southern coefficients average 1¼ or 1⅓ times the Northern coefficients.

The results of this section can be briefly summarized as follows: (1) There is a greater diversity or variation in common-labor rates in the South than in the North whether measured between industries or between states; and (2) with some exceptions, Southern wage rates for manufacturing industries show wider variation within skill categories or for single occupations.

IV

This section deals with variations in occupational wage levels between cotton-textile mills, especially establishments within the same labor-market area.

In making interplant comparisons of straight-time hourly earnings for six occupations it has not been possible to eliminate any interplant differences in job content and workloads. The duties and expected performance, say, for spinners or weavers or loom-fixers, may vary somewhat from mill to mill, depending upon the type of frames and looms, the yarns and construction,[33] and mill practices and requirements. Nevertheless cotton-textile machinery, especially through the spinning stage, is fairly standard. Consequently, jobs, such as card tenders and strippers or spinning doffers, presumably represent much the same kind of work regardless of the mill, and differences in workloads are generally not great, especially within a labor-market area. The job of janitor (or scrubber and sweeper) also should not vary much from mill to mill. Therefore, interplant differentials in earned rates for such occupations should generally represent differences in pay for substantially the same work.

The basic wage data for Tables X and XI were obtained by the U. S. Bureau of Labor Statistics through field visits, using standard job descriptions and a uniform pay-roll period for each area. In the less concentrated areas, practically all of the plants were visited; in the concentrated areas of textile production, representative samples, including approximately half of the mills, were used. The "textile labor-market areas" were established by the Bureau, partly "on the basis of similarity of the general wage levels of the mills in the respective areas."[34] Where an area includes as many as four or five counties and extends for 70 to 100 miles, it encompasses a territory greater than would be involved in distances for workers commuting to a production center and, therefore, is not, strictly speaking, a single labor market.

The spread in levels of occupational wages between textile firms in 15 areas is indicated in Table X. For all occupations except janitor in those 15 areas,

[33] Duties and expected performance may vary from time to time within a mill for these reasons.

[34] See *Cotton Broad-Woven Goods and Yarn Mills: Five South-eastern States, Straight-Time Average Hourly Earnings, Selected Occupations, July 1943*, U. S. Bureau of Labor Statistics, Atlanta Regional Office, February 7, 1944, p. 2.

TABLE X

RANGE IN PLANT-AVERAGE HOURLY EARNINGS FOR 6 COTTON-TEXTILE OCCUPATIONS IN 15 LABOR-MARKET AREAS, JULY 1943[a]

LABOR-MARKET AREAS[b] AND NUMBER OF MILLS	LOOM-FIXERS, EXCEPT ON JACQUARD LOOMS (MALE)			CARD TENDERS AND STRIPPERS (MALE)			DOFFERS, SPINNING FRAME (MALE)			SPINNERS, RING FRAME (FEMALE)			WEAVERS, EXCEPT ON JACQUARD LOOMS (FEMALE)			JANITORS (MALE)		
	High (cents)	Low (cents)	Diff. in % of high	High (cents)	Low (cents)	Diff. in % of high	High (cents)	Low (cents)	Diff. in % of high	High (cents)	Low (cents)	Diff. in % of high	High (cents)	Low (cents)	Diff. in % of high	High (cents)	Low (cents)	Diff. in % of high
54 Charlotte (N. C.) mills	89	69	22%	60	42	30%	72	40	44%	60	41	32%	77	51	34%	47	40	15%
28 Greenville-Spartanburg (S. C.) mills	85	63	26	55	46	16	65	48	26	61	46	25	75	55	27	48	40	17
28 Statesville (N. C.) mills	87	54	38	62	40	35	73	41	44	62	40	35	67	43	33	54	40	26
27 Burlington-Winston-Salem (N. C.) mills	88	77	13	59	45	24	70	46	34	65	47	28	69	50	28	50	40	20
11 Rocky-Mount (N. C.) mills	81	55	32	58	41	29	66	41	38	52	45	13	64	45	30	45	40	11
9 Danville (Va.) mills	88	73	17	58	44	24	78	45	42	77	44	43	69	54	22	50	40	20
8 Raleigh-Durham (N. C.) mills	76	50	34	57	44	23	61	42	31	57	43	25	60	43	38	49	40	18
7 Atlanta (Ga.) mills	71	56	21	51	40	22	70	54	23	54	45	17	57	41	28	43	40	7
7 Asheville (N. C.) mills	73	67	22	53	40	25	64	43	33	52	40	23	67	50	25	49	40	18
5 Huntsville-Decatur-Florence (Ala.) mills	71	60	15	62	49	21	63	48	24	56	46	18	62	48	23	48	43	10
5 Augusta (Ga.) mills	77	63	18	54	47	13	64	40	38	56	45	20	64	48	25	42	40	5
5 Fayetteville (N. C.) mills	76	67	12	57	45	21	63	45	29	54	45	19	65	50	23	48	45	6
3 Birmingham (Ala.) mills	78	60	23	50	43	14	52	45	13	53	43	19	62	55	11	48	40	17
3 Macon (Ga.) mills	72	63	13	51	43	16	57	44	23	55	49	11	62	58	6	41	40	2
3 Chattanooga (Tenn.) mills	—	—	—	60	45	25	58	45	22	60	48	20	—	—	—	50	47	6
All 203 mills	89	50	44	62	40	35	78	40	49	77	40	48	77	41	47	54	40	26
30 Union mills (Aug. 1944)	88	66	25	63	45	29	75	53	29	60	49	18	71	54	24	50	45	10

[a] Sources of data: the U. S. Bureau of Labor Statistics supplied the material covering mill averages for 203 mills (116 integrated mills and 87 yarn mills) in the 15 areas in 6 Southern states. Preliminary figures for the larger labor markets were summarized in *Cotton Broad-Woven Goods and Yarn Mills: Five Southeastern States, Straight-Time Average Hourly Earnings, Selected Occupations, July 1943,* U. S. Bureau of Labor Statistics, Atlanta Regional Office, February 7, 1944 (21 pp. mimeographed).

Data on the 30 mills in 7 Southern states under Union contract were taken from *Wage Analysis Showing Straight-Time Average Hourly Earnings and Gross Average Hourly Earnings of Each of the Certified Mills—September 1944,* In the Matter of 25 Southern Cotton Textile Companies and Textile Workers Union of America, filed with the National War Labor Board, October 6, 1944.

[b] The countries included in each labor market area are as follows: Gaston, Mecklenburg, Cabarrus, Cleveland and Union in the Charlotte area; Greenville and Spartanburg in the Greenville-Spartanburg area; Burke, Caldwell, Catawba, and Rowan in the Statesville area; Alamance, Guilford, Davidson and Forsyth in Burlington-Winston-Salem area; Halifax, Edgecombe, and Wilson in the Rocky-Mount area; Halifax, Pittsylvania, and Rockingham (N. C.) in the Danville area; Durham, Wake, and Orange in the Raleigh-Durham area; Fulton and De Kalb in the Atlanta area; Buncombe, Henderson, and McDowell in the Asheville area; Madison, Morgan, and Lauderdale in the Huntsville-Decatur-Florence area; Richmond in the Augusta area; Cumberland in the Fayetteville area; Jefferson in the Birmingham area; Bibb in the Macon area; and Hamilton, Bradley, and Walker (Ga.) in the Chattanooga area.

firms with the lowest occupational average were paying from 11 to 43 and 44 per cent under the occupational average for the firm paying the highest average in the area. The spread for the five occupations (except janitor) averages approximately 25 per cent for the 15 labor-market areas.[35] In the case of janitors, the average range is around 13 per cent, and is obviously affected by the enforcement of a 40-cent minimum under the Fair Labor Standards Act.[36]

The average North-South differential in cotton textiles for comparable jobs was perhaps 10 or 12 per cent in July 1943. The average straight-time hourly earnings for all textile workers in the South were then 20 per cent below a similar average for the North, but the North concentrates more on fine goods, which require a much higher proportion of skilled workers than do coarser fabrics, which bulk larger in the output of Southern mills. Also the South has a much higher proportion of yarn mills, which are relatively low in their requirements for skilled labor. Such factors obscure the real average differential in wage rates for a comparable work force in the North and in the South.

From Table X it seems clear that the differentials between firms in the same labor-market area in the South are well in excess of the average North-South wage differential for cotton textiles. For many occupations and areas the inter-firm differential in a market area is two or three times the real North-South differential in textile wages, and for all 203 Southern mills the inter-plant spread is comparatively larger. It is interesting to note that the wage spreads in Table X are fairly wide even when only three or five mills are included in an area. Yet data for other industries and occupations indicate that the high-low spread for Southern textile mills in one labor-market area is not abnormally large. Indeed, the average spread in Table X is considerably smaller than those for seven machine-shop occupations in 40-odd Philadelphia firms in April 1927 and October 1929.[37] Table X also indicates that the high-low spread between averages for 30 unionized mills in seven Southern states in August, 1944, was not as great as the inter-mill spread in a number of labor-market areas one year earlier.

The situation is much the same in the furniture and the seamless and full-fashioned hosiery industries, in the South. Analysis of plant-average wages for the chief occupations in furniture and hosiery in the middle of 1943 shows a high-

[35] Ranging from an average of 22 per cent for loom-fixers to 31 per cent for spinning doffers.

[36] In the 15 labor-market areas a total of 30,831 persons were employed in the 6 occupational categories specified in Table X. In those 6 categories, the total employees by labor-market areas were: 7,704 for the Charlotte area, 4,296 for Greenville-Spartanburg, 2,807 for Statesville, 4,053 for Burlington-Winston-Salem, 1,806 for Rocky Mount, 3,062 for Danville, 1,140 for Raleigh-Durham, 778 for Atlanta, 1,147 for Asheville, 1,152 for Huntsville-Decatur-Florence, 791 for Augusta, 965 for Fayetteville, 302 for Birmingham, and 394 for Macon. For the 6 occupational categories, the number of employees per plant ranged from 1 to 225 (average 29) for loom-fixers, 1 to 113 (average 16) for card tenders and strippers, 1 to 324 (average 30) for spinning doffers, 3 to 996 (average 72) for frame spinners, 1 to 450 (average 49) for female weavers, and 1 to 95 (average 11) for janitors.

[37] The inter-firm differential for the 7 occupations ranged from 32 to 56 per cent of the highest firm-average in 1927 and from 38 to 51 per cent of such an average in 1929. See H. La Rue Frain, "Wage Levels between Firms," *American Economic Review* XXI (December 1931), Table II, p. 623.

low spread or plant differential in the Winston-Salem area (having 28 plants) of around 40 per cent.[38] The spread was from 50 to 70 per cent of the high in a third of the furniture and hosiery occupations. The high-low spread between plant averages for the eight furniture areas as a whole averages around 50 per cent for the chief occupations, compared with an average North-South wage differential of no more than 30 per cent in furniture in 1943. For the five full-fashioned and the eight seamless hosiery areas, the spread between the high and the low plant averages was also around 50 per cent compared with average North-South wage differentials of about 25 and 10 per cent respectively.[39]

That the inter-plant variations in textile rates in the South are not abnormally large seems also to be indicated by the coefficients of average deviation in Table

TABLE XI

Variation in Occupational Wage Levels between Cotton-Textile Firms in the Same Labor Market (as Measured by Coefficients of Average Deviation, Calculated from Plant Averages of Hourly Earnings), July 1943[a]

Labor-market areas	Loom-fixers, except on Jacquard looms (male)	Card tenders and strippers (male)	Doffers, spinning frame (male)	Spinners, ring frame (female)	Weavers, except on Jacquard looms (female)	Janitors (male)
Charlotte (N. C.) mills[b]	6.1%	6.6%	11.9%	6.2%	8.8%	3.0%
Greenville-Spartanburg (S. C.) mills[b]	4.6	3.0	6.7	5.6	8.2	4.1
Statesville (N. C.) mills[b]	11.4	10.9	14.0	10.8	11.3	6.5
Burlington-Winston-Salem (N. C.) mills[b]	7.6	6.1	9.7	7.4	9.1	5.5
Mills in 15 labor markets[b]	7.9	7.4	12.5	7.7	12.7	5.7

[a] Source of data: U. S. Bureau of Labor Statistics, typewritten sheets.

[b] The number of mill averages for each labor market varies from occupation to occupation ranging from 15 for weavers to 49 for card tenders in the Charlotte area, from 18 for weavers to 27 for janitors in the Greenville-Spartanburg area, from 6 for weavers to 27 for doffers and spinners in the Statesville area, from 15 for weavers to 22 for janitors in the Burlington-Winston-Salem area, and from 102 for loom-fixers to 183 for doffers in the combined 15 labor-market areas in 6 Southern states. The 15 market areas are listed in Table X.

XI. They may be compared with similar coefficients between industries, between states, and between skills and occupations, set forth in Tables IV, V, VI, VII, VIII, and IX.

The pattern of relationships among the four market areas and the six occupa-

[38] Based on data in *Furniture-Manufacturing Plants: Eight Southeastern Labor Market Areas, Straight-Time Average Hourly Earnings, Selected Occupations*, 1943, U. S. Bureau of Labor Statistics, Atlanta Office, January 6, 1944 (10 pp. mimeographed), and *Full-Fashioned and Seamless Hosiery: Eight Southeastern Labor Market Areas, Straight-Time Average Hourly Earnings*, Atlanta Office, May 6, 1944 (20 pp. mimeographed).

[39] For data on the average North-South differential for furniture and for full-fashioned and seamless hosiery, see Tables IV and VII in "Trends in Southern Wage Differentials since 1890," *Southern Economic Journal* XI (April 1945), pp. 335 and 341.

tions in Table XI appears to be fairly regular or standard. For example, the coefficients for doffers and weavers, and for the Statesville and Burlington-Winston-Salem areas, are relatively high. Those for janitors and for the Greenville-Spartanburg area are low. Indeed, the variation within the single labor market areas of Statesville, Burlington-Winston-Salem, and Charlotte is approximately as great as it was for the whole South in 1937[40] (see Table IX).

The marked contrast between the coefficients of variation for the Statesville and Greenville-Spartanburg areas can partly be explained by the difference in the size of the two areas. The four counties in the Statesville area comprise 1,905 square miles compared with 1,619 square miles for the two counties in the Greenville-Spartanburg area.[41] But mainly the contrast appears to be due to inter-firm differences in wage policies in the two areas. Indeed, for five of the six occupations, the coefficients of variation for the Statesville area are well above those calculated for all 203 Southern mills (the 15 labor-market areas combined).

Such diversity in a single labor-market area indicates a general lack of wage standards. It also indicates that actual determination of wages may differ widely from textbook assumptions. Instead of relative uniformity of rates for an occupation in a labor-market area, there may be wage diversity; instead of a concentration of rates, there is often a wide range without any clear-cut central tendency. The arithmetic mean, the median, and the mode may be far apart from one another as is the case with frame spinners and card tenders and strippers in the Statesville area.[42]

Chart I further illustrates the inter-plant diversity that exists in hourly earnings for single occupations and in occupational wage differentials. The basic data for the chart are mill averages of straight-time hourly earnings by occupation for 30 cotton-textile mills covered by Union agreements and located in seven Southern states.[43] The mills, numbered in the order in which they appear in the source of the data, are distributed in the chart according to the average for loom-fixers in the case of integrated mills and according to the average for spinning doffers in the case of the yarn mills (which on the chart begin with mill 3).

As indicated in the chart, the average for weavers on plain automatic looms is below that for spinning doffers in five mills; the average for spinning doffers is

[40] Except for janitors (or scrubbers and sweepers), which category experienced a sharp compression of wage rates after 1937, mainly through the minima under the Fair Labor Standards Act.

[41] The Burlington-Winston-Salem area consists of 4 counties with 2,077 square miles and the Charlotte area of 5 counties contains 2,569 square miles.

[42] For frame spinners the arithmetic mean is 49 cents, the median is 46 cents, and the mode is 43 cents; for card tenders and strippers the respective figures are 48, 46, and 43 cents. For all 15 labor-market areas, the mean for female weavers is 56 cents, the median is 57 cents, and the mode is 45 cents; for spinning doffers there is also a wide gap between the mean and median at 54 cents and the mode at 45 cents, which enjoys more than twice the frequency of any other rate.

[43] The source of these data is cited in footnote 1 to Table X. They are for a payroll period in August, 1944.

below that for card tenders in three mills; and the average for scrubbers and sweepers equals that for card tenders in four mills. In the integrated mills the

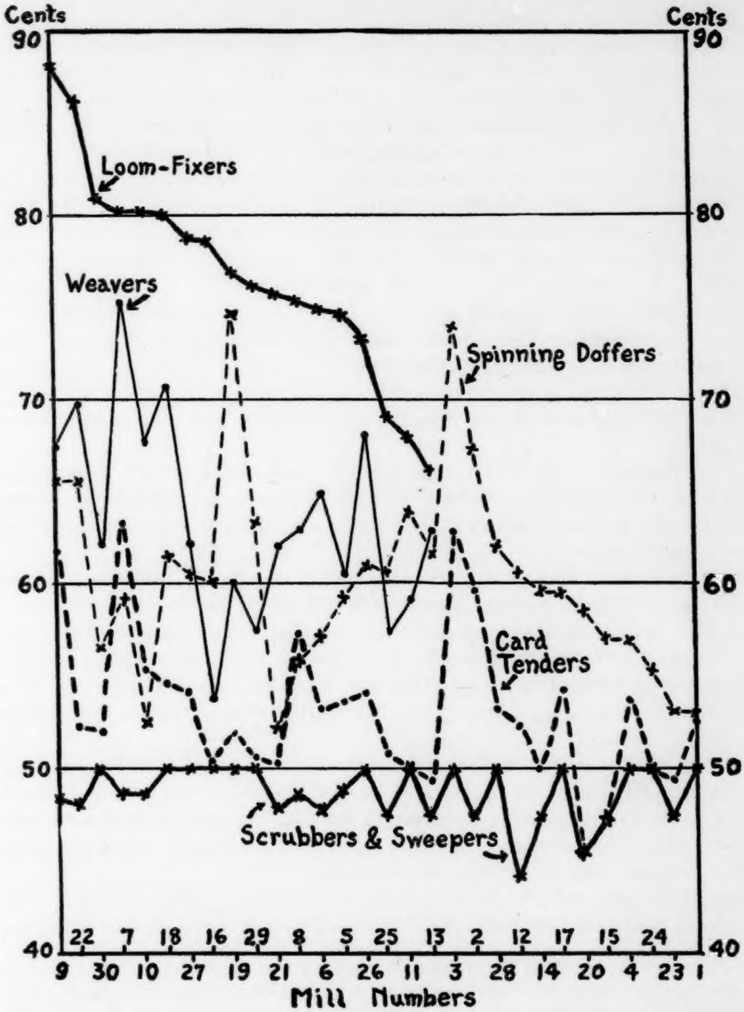

CHART I

differential between loom-fixers and weavers and spinning doffers fluctuates widely. At mill 19, spinning doffers were averaging 13 cents an hour more than weavers and only two cents an hour less than loom-fixers; at mill 16, battery fillers

were averaging slightly more than weavers, whose average was only four cents an hour above that for scrubbers and sweepers. In yarn mills, the average spread between spinning doffers and scrubbers and sweepers varied from 24 cents in mill 3 to three cents in mill 1.

A part of such abnormal variation can, in some cases, be explained by special circumstances at a particular mill, such as the quality of the workers or the character of work, in an occupation in that mill at that time.[44] For the most part, however, the lack of standard wage differentials between occupations appears to be due to the lack of proper job evaluation and elevation of minimum rates without corresponding adjustments throughout the firm's whole wage structure. It is noteworthy that the differential between card tenders and scrubbers and sweepers is greatest in mills using special incentive systems of payment.[45] Early in 1945 some industrial engineering firms with consulting experience in Southern textile mills were asked their opinion as to how accurately wage differentials between jobs in Southern manufacturing concerns measured relative differences in job requirements. The answers ranged from the statement that one-fifth of the wage rates in Southern manufacturing were entirely out of line to the reply that one half of them were so distorted.

The main conclusions drawn from the data in this section may be summarized as follows:

1. Occupational wage differentials between firms within a single labor-market area in the South are from one to three times as large as the real average differential between Southern and Northern wages in cotton textiles, furniture, and hosiery manufacture.

2. Variations in firm-averages by occupation within the South are three or four times as large as the real North-South differential for cotton textiles.

3. The coefficients of average deviation for occupational wage levels of textile firms in the South differ considerably from labor market to labor market and from occupation to occupation. In at least one labor-market area, wage standards are so varied that wage diversity in that market area is greater than for the South as a whole.

4. Wage differentials between occupations within the same mill, between mills in the same labor market, and between mills in the South, are so wide and irrational as to be inexplicable in terms of the market analysis generally used. There simply is not a concentration of rates around a single wage for substantially the same work in the same labor market.

The above facts point to the need for a reformulation of wage theory in terms of a range of rates within limits that change with conditions, in place of the con-

[44] For example, an official of mill 16 states that some of its 46 weavers were often not efficient enough to earn the 50-cent minimum, so that their piece-rate earnings had to be supplemented to bring them up to 50 cents an hour. An official of mill 19 states that, according to special studies, its spinning doffers, who were paid by the doff, had abnormally high earnings at that time because of short doffing—doffing frames before the bobbins were well filled so that an excessive number of doffs per day were made—and because, in certain instances, doffs were marked up in excess of those actually made.

[45] They are mills 9, 7, 10, 8, 6, 5, 3, and 2, which use a modified Bedeaux system.

ception of a single rate that equates demand and supply. The author plans to develop such a range theory of wages in another paper.

V

At the end of each section the conclusions from the data therein presented have been summarized. There is no need to repeat those summaries here.

The general conclusions of this paper can be stated as follows:

1. Wage rates in manufacturing in the South have generally been more diverse and varied than wage rates in the North. Differences in wage policies of firms and industries partly account for the wide variations in North-South wage differentials.

2. A wide disparity exists in wage levels between firms in the same labor-market area in the South and also in occupational differentials between Southern firms in cotton textiles.

3. Differences in wage levels between Southern concerns in industries like cotton textiles or furniture are two to four times greater than the real North-South wage differential for the industry. Wage differentials between firms within the same labor-market area in the South are generally considerably larger than the North-South wage differential.

Such facts raise the question whether reduction or elimination of the North-South wage differential in some industries would have such a significant effect on some Southern industries as is popularly assumed. They also raise the question of the adjustments in wages and operations that would be required in Southern industry should a marked reduction occur in the North-South wage differential. The author will explore that subject in a subsequent paper.[46]

ADDENDUM

That there is a wide diversity from firm to firm in the size of the North-South wage differential is indicated by the replies received from 46 Southern concerns[47] to a questionnaire in June 1945, after the above paper was completed. The replying firms were asked to estimate the percentage that their wage rates were of average Northern wage rates in their industry for comparable jobs. Selected from industries with a marked North-South differential, they were distributed as follows: 12 furniture manufacturing firms; 12 foundry, valve, stove, and machinery manufacturing concerns; 10 cotton clothing manufacturers (work clothes, shirts, women's dresses, and knitted underwear), 4 chemical firms, 3 paint manufacturers, 3 manufacturers of shoes and leather, and 2 full-fashioned hosiery producers.

The replies confirm the conclusions already stated. Eleven of the 46 firms answered that their wage rates averaged as high as those paid in the North for comparable jobs, 9 estimated their rates at 90 per cent of comparable Northern

[46] Scheduled to appear in a forthcoming issue of the *American Economic Review*.

[47] Of some 400 firms questionnaired, these 46 were the only ones giving an adequate answer to that question. The replying firms were located in Alabama, Arkansas, Florida, Georgia, Louisiana, North Carolina, Tennessee, Texas, and Virginia.

rates, 6 at 80 per cent, 8 at 75 per cent, and the remaining 12 replies ranged from 60 to 96 per cent of the Northern average for comparable jobs. Of the 12 furniture firms, 2 replied 100 per cent, 3 estimated their rates at 80 per cent of comparable Northern rates, 2 at 75 per cent, 2 at 70 per cent, 1 at 65 per cent, and 1 at 60 per cent, the average for all 12 furniture firms being 80 per cent. The replies of the 10 cotton clothing concerns ranged from 2 at 80 per cent to 3 at 100 per cent; those of the 4 chemical firms ranged from 70 per cent to 100 per cent. The 2 full-fashioned hosiery concerns both replied 95 per cent. In the remaining 3 industries groups (12 foundry, valve, stove, and machinery concerns, 3 paint producers, and 3 shoe and leather producers) the replies ranged from 75 to 100 per cent.

The 46 replying firms appear to be a fairly representative sample. They have an average of 570 employees (firm range from 8 to 8,200), and an average wage level estimated at 86 per cent of the Northern average for comparable jobs. Students of wage statistics will not be surprised by the fact that one-fourth of the replying firms considered their wage rates as high as the average for comparable jobs in the North.

A RE-EXAMINATION OF JEFFERSONIAN ECONOMICS[1]

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In so complicated a science as political economy, no one axiom can be laid down as wise and expedient for all times and circumstances, and for their contraries.

Jefferson, 1816

It is with some hesitancy and not a few misgivings that one must approach the economic writings of Thomas Jefferson. So much has been written about Jefferson in the past century and a half, so diverse are these expressions, and so overlaid has his thought become with the views of his interpreters, that any addition to this grand depository can be justified only as a departure from past efforts. The student of economic doctrine cannot but be a little bewildered upon comparing what Jefferson wrote on economic matters with what he is reputed to have believed. The purpose of this paper is mainly the negative one of demonstrating that the prevalent notions of Jeffersonian economics cannot be substantiated by reference to his works, and it would not be offered, at least in its present form, if these notions had not such general currency. To serve this end, I shall attempt (1) to show that there was not one system of Jeffersonian economics, but three corresponding to three periods in his public life; (2) to set down the sources of this thesis and to show its development in Jefferson's hands; and (3) to show the relation between Jefferson's economic doctrine and that prevailing concurrently in Europe, and the inter-relations between his economic and political thought, the last because of the intimacy of the connection and its importance for understanding the man's doctrine. The method adopted in this study is a genetic one. Because of the significant changes in his thought, it can be examined most fruitfully by tracing its evolution in some detail.

To the mystification of students in the economic field, Jefferson has been fixed, variously, as a Physiocrat, an advocate of agrarian self-sufficiency, as an apologist for agrarian capitalism (a kind of bucolic Hamilton), as a protectionist, single-taxer, disciple of Adam Smith, forerunner of Marx, "democratic collectivist,"[2]—to say nothing of the more esoteric interpretations that have been

[1] The writer wishes to express his indebtedness to Professors F. H. Knight, L. W. Mints, and H. C. Simons, of the University of Chicago, for their criticism, without, however, implying any responsibility on their part for errors of fact or interpretation.

[2] One of the most celebrated of the many interpretations of Jefferson as a Physiocrat was made by V. L. Parrington, *The Colonial Mind*, Vol. I of *Main Currents in American Thought* (New York: Harcourt Brace, 1927), pp. 346–48. Another is to be found in Francis W. Hirst, *Life and Letters of Thomas Jefferson* (New York: Macmillan, 1926), p. 256. Here he is made a disciple of both Physiocracy and Adam Smith!

The agrarian emphasis is stressed to the exclusion of all else in the collection of Jefferson's writings entitled *Democracy*, ed. S. K. Padover (New York: D. Appleton-Century, 1939), chap. iv on "Political Economy." The guide to the selection of this material, which purports to be representative, is somewhat obscure, for the collection contains no evidence

laid upon his work.[3] It is obvious that he could not have been all of these, or even many of them, and it is equally true that, however valid some of these interpretations are for a particular period of Jefferson's life, each is in error to the extent that it purports to describe any doctrine as held throughout his entire career.

Neither the political nor economic principles of Jefferson's thought ranked as presuppositions, but were as sides of a coin minted from his conception of human nature. This conception was drawn from the systems of Helvétius and Holbach, who however much they may have antagonized Jefferson by their materialistic bias influenced him by their utilitarian doctrine. Human nature, to Jefferson,

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whatever of Jefferson's change of doctrine in his later years omitting completely all letters in which he accepted the protection of American manufactures as a political necessity. The only reference to protection in the entire collection is a letter in which Jefferson opposed the execution of the tariff program; and it, appearing out of context, produces the impression that he was opposed to protection, per se.

Jefferson's "pecuniary logic" is made the motif of his economic policy in Joseph Dorfman's study of "The Economic Philosophy of Thomas Jefferson," *Political Science Quarterly* Vol. LV, pp. 98–121. In this study, one of the few executed in any detail, Professor Dorfman maintains that Jefferson's ideal economy was "commercial-agrarian," (p. 105) and states Jefferson's premises as follows:

"His was the planter's logic. Under it wealth meant landed possessions, but specie, credit, markets and more lands were necessary for its maintenance and increase." P. 99.

The differences between Professor Dorfman's conception of Jefferson's doctrine and that presented in this paper will become evident below.

The portrait of Jefferson as the complete protectionist was made by Friederich List, of the early German Historical School of Economics. See his *Outlines of American Political Economy* (Philadelphia: Samuel Parker, 1827), pp. 37–38, and *The National System of Political Economy* (London: Longmans-Green and Co., 1904), p. 83.

Henry George claimed Jefferson as an advocate of the single tax. See Henry George, "Jefferson and the Land Question," in *The Writings of Thomas Jefferson*, ed. Albert Ellery Bergh (Washington: Thomas Jefferson Memorial Association, 1907), XVI, pp. i–xiv.

Charles Maurice Wiltse maintains that one facet of Jefferson's doctrine implied socialism, that he anticipated, "though did not clearly foresee," the concept of the class struggle as enunciated by Marx, and that he was similar to Lenin in being a "practical" theoretician whose great forte was an ability "to work out solutions demanded by the times." *The Jeffersonian Tradition in American Democracy* (Chapel Hill: University of North Carolina Press, 1935), pp. 5, 137, 214.

The elements of *laissez faire* in Jefferson's thought are stressed by Joseph Spengler, "The Political Economy of Jefferson, Madison, and Adams," in *American Studies in Honor of William Kenneth Boyd*, ed. David Kelly Jackson (Durham: Duke University Press, 1940), pp. 3–59. This detailed study suffers from viewing Jefferson's doctrine as a set of static conceptions rather than as a system constantly changing to meet changing national problems. See for example, Professor Spengler's summation of Jefferson's position on *laissez faire*, pp. 40–41; the three quotations here are extracted from declarations made in 1801, 1788, and 1808, respectively. Taken out of context they have a certain show of consistency, but when related to other statements of the respective periods they actually denote three very different points of view.

[3] As, for example, Ezra Pound, *Jefferson and/or Mussolini* (London: Stanley Nott, 1935), of which the following is suggestive:

"Jefferson was one genius and Mussolini is another. I am not putting in *all* the steps of my argument but that don't mean to say they aren't there." P. 19.

was not to be taken as given (as it was to Hamilton) but as subject to restraint and improvement at the hands of a government that would be subject to the same forces in the hands of the people. Neither governors nor governed could be trusted, nor could a system of checks and balances be relied upon to achieve an equilibrium of interests and thereby maintain peace and liberty. Elementary caution, he believed, demanded that governmental powers be few and extremely limited. He believed individuals should not be permitted to acquire wealth enough to give them great influence, and, that government should not be given significant powers to control economic behavior. Jefferson was at one with Hamilton's dictum, that power over a man's subsistence is power over his will,[4] but, unlike Hamilton, he did not believe that men were capable of looking after their own interests by creating a governmental structure in which an equilibrium between opposing interests would be established and departures from it would be largely self-correcting. Rather than give each individual and group the power to advance its own ends and to protect itself against incursions by others—which was the rationale of the tri-partite structure of government—Jefferson believed that the sources of conflict had to be removed before "right" social relations could be established. The source of most evil was, he maintained, men's material interests. Hence the kind of economic behavior men engaged in was of fundamental importance to a government that wished to preserve order and liberty. If men were to be turned to the true path of social righteousness, they must be turned away from the mainsprings of corruption, and the great and leading principle of economic policy then became the cultivation of an economic environment that would be conducive to the realization of the ends of government.

Given these primary considerations, it is possible, I believe, to explain the great political and economic struggles of the years from the Constitution to the rise of Jacksonian democracy and to discover the essential differences that separated the first two parties and their successors to the year 1829. Though the convenient categories of "aristocrat and democrat," or "nationalist and states-righter," "mercantilist and Physiocrat" may serve for some purposes, they help but little in fixing clear-cut distinctions; and for purposes of discovering differences in economic doctrine they are of no help at all. Here it must be noted, that to speak of Jeffersonian *economics* is somewhat misleading, for neither Jefferson nor his followers pretended to develop a theoretical system embracing value, distribution, finance, and economic policy, as the British and French economists of the period were doing. No one in America attempted such a system until the third decade of the nineteenth century when Daniel Raymond wrote his *Thoughts on Political Economy*. "Jeffersonian economics" is really a set of ideas concerning the economic role of the state together with a few, and cursory, remarks concerning value and money. This is not to say that the early Americans were unaware of the totality of prevailing economic thought but that they were most concerned with those aspects relevant to the problem of government.

[4] Hamilton, *The Federalist*, No. 79.

I

Jefferson's earliest expression of doctrinal importance was made in 1774 when he wrote in *The Summary View of the Rights of British America* that the exercise of free trade was "possessed by the American colonists, as of a natural right," and he described the act of George II forbidding Americans to make fur products as "an instance of despotism to which no parallel can be produced in the most arbitrary ages of British history."[5] He declared that freedom in the disposition of property was one aspect of the total endowment of freedom that man derived from the Creator.[6] Although the reference in this tract is to real property, or economic goods, Jefferson usually meant much more by the term "property" and most often used it as his spiritual forebear, John Locke, did, to comprehend man's "life, liberty and estates."[7] Jefferson believed with Locke that men form societies in order to protect their "property,"[8] and he meant by this, not that government exists to secure wealth and vested interests (as is so often claimed), but to guarantee each man's birth-right to liberty.

Jefferson's next work of importance was the famous *Notes on Virginia* in which he described in encyclopedic fashion the most important agricultural state and one of the two or three most important economic regions in America, and appended sundry observations on man and the material with which he worked. These notes, from which Jefferson's reputation as a Physiocrat is largely derived, were written before 1781 and hence before he left America to become ambassador to France. They grew out of observations made over a number of years preceding his departure, and they were by no means intended to be exhaustive nor even to represent satisfactorily Jefferson's views on the limited subjects treated. They were published about 1785 with some hesitation, and then privately circulated. The original edition, published in French, was, in Jefferson's words, "interverted, abridged, mutilated, and often reversing the sense of the original." A partially corrected English edition was published later, but was not completely accurate.[9] Yet it is this admittedly tentative and not completely reliable publication that first gave Jefferson his reputation as a Physiocrat.

In the English edition the *Notes* are still replete with panegyrics over the agriculturist. Agriculture begets self-sufficiency; it creates a stalwart yeomanry that is the bulwark of liberty and bearer of an elevated moral code. "Those who labor in the earth are the chosen people of God."[10] This agrarian strain runs throughout Jefferson's life. In 1804, he wrote to J. B. Say, the French classicist, that the agriculturist possessed a "moral and physical preference" over the laborer of the cities.[11] In 1816, after he had become a protectionist, he still clung

[5] *Writings*, I, p. 189. (All references to Jefferson's works are to the Bergh edition.)
[6] *Ibid.*, I, pp. 210–11.
[7] John Locke, *On Government, Two Treatises* (London: J. M. Dent, 1940), p. 180.
[8] Jefferson to du Pont de Nemours, *Writings*, XIV, p. 490.
[9] "Autobiography," *ibid.*, I, pp. 90–92.
[10] *Writings*, II, p. 229.
[11] *Ibid.*, XI, pp. 1–3.

to the supremacy of agriculture and maintained that it produced a value greater than an equal application of labor and capital to manufacturing because of "the spontaneous energies of the earth."[12] Jefferson's agrarianism was infectious, and the superiority of farming became a byword among those who were opposed to the industrialization of America. The protectionists were forever confronted with a kind of moral superciliousness on the part of the agrarians. Matthew Carey, inveterate champion of a high tariff and prolific pamphleteer on its behalf, blamed this hauteur upon Jefferson and added querulously: "His Arcadia must have been sought, not in Virginia or Maryland, but in Virgil's or Pope's pastorals, or Thomson's seasons."[13]

Yet Jefferson's preference for agriculture does not necessarily make of him a Physiocrat any more than a forerunner of the Congressional farm bloc. Even in the years before 1790 when his agrarianism was most pronounced, it was not a system of true Physiocracy. Although Jefferson commended at various times throughout his life the work of *Les Économistes* and noted particularly du Pont de Nemours, Quesnay, Gournay, Le Trosne, Turgot, and Destutt de Tracy, he was also familiar with the doctrines of Say, Malthus, Sismondi, Hume, John Law, and Smith. Of the last, he declared: "In political economy, I think Smith's *Wealth of Nations* the best book extant."[14] Because he possessed an almost religious devotion to the soil, Jefferson usually has been called a Physiocrat, the assumption apparently being that such devotion was the essence of Physiocracy and the direct, tangible proof deriving from Jefferson's residence in France and his mention of the doctrine. Yet in his works there not only is no definitive exposition of Physiocratic doctrine[15] but there is not even any evidence that he was more influenced by it than by British classicism. In point of formal respect paid to contemporary doctrine, Jefferson is much more of a British classicist than a follower of the French economists; even his rent theory is in no way inconsistent with that of Smith.[16]

The best statement of Physiocratic doctrine came from an American opponent of the system, Alexander Hamilton, who set down its principles only in order to refute them. Hamilton evinced a thorough familiarity with the Physiocratic concept of the *produit net*, the categories of productive and unproductive labor,

[12] "To Benjamin Austin," *ibid.*, XIV, p. 390.

[13] Matthew Carey, "The New Olive Branch," in *The New Olive Branch* (Philadelphia: M. Carey, 1820–31), p. 24.

[14] "To Thomas Mann Randolph" (1790), *Writings*, VIII, p. 31.

[15] *After* he had abandoned his early, and most intense, agrarianism, Jefferson wrote the following which contains one of the two most explicit references to Physiocratic doctrine that I have been able to find: "A prosperity built on the basis of agriculture is that which is most desirable to us, because to the efforts of labor it adds the efforts of a greater proportion of soil." ("Circular to the American Consuls," May 31, 1792, *Writings*, VIII, p. 352.)

It should be noted that the circular concludes with the very *un*-Physiocratic statement that the United States is not disposed to remove its restrictive commercial policy until Europe freely admits American goods.

[16] Cf. the above "Circular" and Jefferson's letter to Benjamin Austin (1816), *ibid.*, XIV, p. 390, with Smith, *The Wealth of Nations*, ed. Cannan, p. 146.

and its capital and taxation theory.[17] Even in his most pronounced agrarian period, Jefferson did not express such notions. When Jefferson jotted down his *Notes*, he was, in common with many, extremely optimistic about the reaction which an independent America would receive from Europe. Like Paine, Hamilton,[18] and others, he expressed the belief that the nations of the world would spare no effort in bidding for the trade of the United States and in engaging it in a profitable commerce. This would enable the United States to specialize in agriculture, for which it was eminently fitted, and to draw manufactured products from Europe. The achievement would be twofold. It would enhance the wealth of America and would prevent the growth of manufacturing centers. He was frightened at the prospect of an urban proletariat dependent upon the "casualties and caprice of customers," for such "dependence begets subservience and venality."[19] He decried the depravity of the lower orders of Europe, which were held in bondage to a few "millionary merchants" and corrupted by their commercial morals.[20]

Jefferson was much more explicit in his opposition to manufactures than in his preference for agriculture; like many others of the period he was more vigorous in denial than affirmation. Throughout his life, he deplored industrialization even after he had come to accept its inevitability. Manufacturing centers were the mainspring of corruption, the prime source from which all evil flowed. Jefferson's reputation as a friend of man and a believer in the righteousness of the people is somewhat impaired when one considers his remarks on the proletariat of France and England;[21] these are no more charitable than the harshest strictures of Hamilton. Believing as he did that men should be removed from evil and confronted with good, Jefferson fought for many years against the development of an industrial environment in America and chose agriculture as an alternative. He was supported in his position by underlying economic conditions that were unfavorable to the natural development of manufacturing. He was hostile, needless to say, to any governmental action that would artificially alleviate the naturally unfavorable conditions and promote industrialization.

In 1788, while ambassador to France, he was asked by a European who wished to establish a textile mill in the United States what assistance might be expected from the American government. Jefferson's reply is of interest for what it reveals of economic conditions in the United States and even of greater interest for what it tells of his own attitude. He noted very politely but nonetheless pointedly every conceivable reason why a textile mill would fail in the United

[17] Hamilton, "Report on Manufactures," in *Industrial and Commercial Correspondence*, ed. A. H. Cole (Chicago: A. W. Shaw, 1928), pp. 248–50. This section may be compared with, e. g., Anne Robert Jacques Turgot, *Reflections on the Formation and Distribution of Riches* (New York: Macmillan, 1898), especially pp. 7, 83, 95–97.

[18] See Paine "The American Crisis" in *The Life and Works of Thomas Paine* (New Rochelle: Thomas Paine National Historical Association, 1925), III, pp. 90–91; and Hamilton, *The Federalist*, XI.

[19] "Notes on Virginia," *Writings*, II, p. 229.

[20] *Writings*, XV, p. 29.

[21] "To John Adams," *ibid.*, XIII, pp. 401–402.

States, and concluded that the manufacturer could not expect assistance of any kind from the government of the Confederation, adding,

It is not the policy of the government in that country [the United States] to give aid to works of any kind. They let things take their natural course without help or impediment, which is generally the best policy.[22]

He continued: "In general, it is impossible that manufactures should succeed in America," because of the scarcity of labor and the consequent high wages. To bring foreign artisans would be a wasteful expedient, according to Jefferson, for they would soon go into agriculture where opportunities were greater. But his opposition extended beyond manufacturing. He was really hostile to the main currents of economic behavior of the eighteenth century, because, quite consistently with his political premises, these forced men to a preoccupation with material endeavor, which he considered debasing. As will be seen from the following letter, written in 1785 to Hogendorp, he was opposed not only to manufacturing but to exchange as a method of economic organization:

You ask what I think on the expedience of encouraging our states to be commercial? Were I to indulge my own theory, I should wish them to practise neither commerce nor navigation, but to stand, with respect to Europe, precisely on the footing of China. We should thus avoid wars, and all our citizens would be husbandmen. Whenever, indeed, our numbers should so increase that our produce would overstock the markets of those nations who should come to seek it, the farmers must either employ the surplus of their time in manufactures or the surplus of our hands must be employed in manufactures or in navigation.[23]

However, such passive commerce was not to the taste of Yankee entrepreneurs, Jefferson noted and added that in the circumstances the best policy was one which minimized the evil by keeping all manufactures in Europe.

Before 1790, Jefferson's conception of the ideal American economy was rather hazy, but it seems to have been one with a great deal of local agrarian self-sufficiency supported by household manufactures. This may be inferred from his aversion to the market,[24] which he believed was destructive to the independence of the mass of the people. Yet Jefferson was not at all consistent on this point, for he advocated both self-sufficiency and international free trade—types of economic behavior that are mutually exclusive. If America were to become a nation of small agricultural units implemented by household manufactures, exchange as a form of economic organization would tend to become less and less important. On the other hand, if America were to specialize in agriculture and import manufactured products from Europe, self-sufficiency would vanish. In the latter case, the American farmer would become as dependent upon the market as the urban laborer of Europe. In either case the functions of the government would be much more meagre than if a policy were adopted of direct

[22] "To Mr. Thomas Digges," *ibid.* VII, pp. 49.
[23] *Writings*, V, p. 182.
[24] *Ibid.*, VII, pp. 47–49.

state intervention in economic life. If free international trade were the objective, the national government would have the obligation of enforcing the rules of the competitive game; if agriculture were combined with household manufacture, the national government would have virtually no economic functions and the functions of state and local governments would be negligible. The national government would not require the power which would be necessary in order to watch over a market economy, for the markets would be small, dispersed throughout the states, and would largely supervise themselves with the aid of state or local governments. If the objective of self-sufficient agrarian units were completely realized, markets would disappear.

Neither system of economic organization shows any affinity to Physiocracy. The Physiocrats believed in free trade, of course, but this was not their distinguishing characteristic. They also based their economy on the superiority of agriculture, but the justification did not run in vague terms of moral superiority but took the form of a very elaborate value theory. With the notion of self-sufficient agrarian units, Physiocracy had nothing in common. As Smith has suggested, Physiocracy may be considered a reaction against the special privileges obtained by manufacturing under the mercantilist regimes of France. Jefferson's preference for agriculture was hardly an aversion to manufacturing in this sense, for there was no manufacturing of any significance in America and it received no special attention until 1791, when Hamilton submitted his program of protection. This was some time after Jefferson's early agrarianism had been modified.

In the dual position which he held before 1790, the implications of agrarian self-sufficiency are fairly obvious. The meaning of free trade, however, is not always apparent, and the role of such doctrine is an elusive one, not only in Jefferson's system but in most of the writings of the years between the two wars with Great Britain. When Jefferson gave free trade the status of a natural right, as he did in *The Summary View*, and decried its interdiction by England, he wrote in an idiom common to the times. This has been interpreted in two ways: the Americans may have been insisting upon *laissez faire* in the conventional sense of a free and unrestricted international trade, or they may have used such doctrine as a rhetorical device to conceal economic motives.[25] Farther on in *The Summary View*, Jefferson indicated that the Americans simply wanted equality of treatment within the orbit of British mercantilism, that they were willing to grant all "reasonable" regulation of their trade by the mother country but insisted on disposing as they chose of those commodities which England could not use.[26] From the point of view of British mercantilism, such a concession was not at all reasonable, for the system of economic control had to be pervasive in order to be a system. To have permitted American manufactures, even of those commodities not directly in competition with British goods,

[25] This latter view is held by Vernon G. Setser, *The Commercial Reciprocity Policy of the United States, 1774–1829* (Philadelphia: University of Pennsylvania, Press, 1937), p. 257.

[26] *Writings*, I, pp. 189, 191, 210.

would have increased the power of the colonies and eventually would have evoked direct competition.

To support the contention that free trade expressions were ephemeral rhetoric, the mercantilist practices of the states under the Confederation and Hamilton's economic policy are often adduced. Yet these were by no means universally approved. It is a common mistake to attribute the policy of one set of interests to the whole country. Writing a few years after the Peace of Paris, John Adams lamented the shackles that were imposed on commerce. The war, he said, had been fought for the "freedom of commerce," yet once it was won, commerce was treated with high disregard for its rights.[27] Doctrines of *laissez faire*, both in its French and British form, were frequently expressed in this period and later in the Constitutional Convention, either directly when the discussion turned on the scope of the economic powers of the government or obliquely when specific powers were considered.[28] It is true that certain mercantilist notions were also expressed, very often by the same people. The relationship cannot be examined here, but the real problem can be suggested.

More was involved than either free trade, mercantilism, or dissembling. The issue was the right and the power of one nation to determine its own economic policy. The question was whether the United States, Great Britain, or any other country could take the rest of the world as given. On this consideration, the cries of some "quasi-mercantilists" for the right of free trade do not appear absurd. They insisted that America could set any commercial policy that it pleased, that this was a natural right, even if it meant a policy that was hostile to free trade in the conventional sense. Hence, during the second war with Britain Hezekiah Niles, a staunch protectionist, could exclaim: "The gallant Decatur's toast, 'Free trade and no impressment,' unsophisticated and in itself, embraces the whole business of the war."[29] Actually one nation cannot take the world as a datum; such an assumption is both false to fact and to the natural right's doctrine of the period.[30] The simple act of levying an impost solely for revenue will eventually react on the restricting country. Nations cannot adopt an instrumental attitude, any more than individuals can.

Although he later became something of a parochial nationalist, Jefferson in the revolutionary and constitutional period gave to free trade the meaning it possessed in the works of Hume and Smith. His words and policy to the year 1805 reveal this.

II

When Jefferson returned from France and became Secretary of State in Washington's first cabinet in 1790, his economic policy began to change, and in the

[27] John Adams, *Works*, ed. C. F. Adams (Boston: Little, Brown and Company, 1856), IX, p. 560.

[28] This problem is the main subject of a larger work of the writer and can only be suggested here.

[29] *Niles Register*, March 5, 1814.

[30] Cf. Locke, *op. cit.*, p. 191.

succeeding years, until 1805, the ideas which he expressed were markedly different from those of his early life. This period reveals two significant departures from his early position: the idea of self-sufficient economic units, in any *explicit* form, disappears, and his program of free trade is modified by a policy of reciprocity. In this period one can observe an intimate relation between Jefferson's political doctrine and his domestic economic policy. He pursued a policy that was largely in harmony with that of the British classicists; the elements of agrarianism were subsumed in the kind of synthesis made by Joseph Priestley between British classicism and Physiocracy. Priestley, who is better known as the discoverer of oxygen, wrote considerably on political and economic matters, and was a close friend of Jefferson. (He fled to America in 1794, when the British government fell on sympathizers of the French Revolution and after Burke did him the honor of execration in his *Reflections*.) Priestley's *Lectures on History and General Policy* constitute an important liberal testament of the late eighteenth century and are especially relevant for the economic doctrine they expound. He adapted French notions of the supremacy of agriculture to a mixed—agricultural and manufacturing—economy, by declaring that the earth was the ultimate source of all wealth (suggestive of Ricardo's original and indestructible powers of the soil). Manufacturing, however, must be "excited," for it furnishes a market for agricultural products.[31] Where Turgot posited the labor of the husbandman as the only productive factor,[32] Priestley extended the labor theory of value to all productive activity (in the sense of labor as the source of all value).[33]

In his domestic economic policy Jefferson sought to implement his political premises. Believing that society should be the impartial nurse of all of its members, he was opposed to any fiscal policy that benefited one group at the expense of another. He averred that Hamilton's fiscal policy injured the poor mechanics and the small farmers in order to aid the commercial classes and to build a political machine around the Secretary of the Treasury.[34] Although the nature of Jefferson's agrarianism changed after 1790, he did not change his opinion of merchants and manufactures. He continued to oppose any measures that would work to their advantage and assist in the development of an environment that bred "corruption and depravity." Believing that material interests were the principal source of discord in society, he opposed any economic policy that appealed to these interests and sought to make men's support of the government dependent upon the realization of their material objectives. He could never agree with Hamilton that the ideal government connected men's "interests with their virtue," and secured their loyalty by satisfying their material desires. Jefferson's fiscal policy in this period was much less formidable than his criticism of Federalist policy. He opposed the assumption of state debts until their exact amount was known,[35] and he proposed that funding be limited to the re-

[31] Priestley, *Lectures* (Birmingham: Pearson and Rollason, 1788), pp. 365–69.
[32] Turgot, *op. cit.*, p. 9.
[33] Priestley, *op. cit.*, p. 369.
[34] "The Anas," *Writings*, I, pp. 271–74.
[35] *Ibid.*

demption of debt within the lifetime of the security holder.[36] Since no generation has a claim upon the future, no debt can be valid beyond the lifetime of the original holder, he declared. He denied that the debt certificates were a form of capital and cited Smith as his authority.[37] His criticism of funding anticipated John Taylor's elaborate critique of the Federalist "paper system." Jefferson declared:

> that all the capital employed in paper speculation is barren and useless, producing, like that on a gaming table, no accession to itself, and is withdrawn from commerce and agriculture, where it would have produced an addition to the common mass: that it [funding] nourishes in our citizens habits of vice and idleness, instead of industry and morality: that it has furnished effectual means of corrupting such a portion of the legislature as turns on the balance between the honest voters, whichever way it is directed: . . .[38]

Jefferson's criticism of the Bank of the United States was similar in moral tone to that made of the funding program. He considered the first Bank a nursery for "gamblers in corruption," and its specious legality a stain on the Constitution.[39] In his denial of its legality he insisted upon a strict construction of the Constitution. He was opposed to any broad interpretation of the welfare clauses in order to justify the power of incorporation and the granting of subsidies.[40] He saw in Hamilton's banking program a new design to foster despotism by appealing to men's material interests in order to acquire their unquestioning loyalty to the Federalist party.[41] Jefferson originally believed that the evils of banking could be eliminated if the monopoly of the Bank of the United States were broken, but by 1802, when the number of state banks had increased, he held that banking in any form was an unmitigated evil.[42] Just how the economic system was to operate without banks, or what would be established in their place, are matters upon which he did not enlarge.

Jefferson's most specific measures of domestic policy were proposed in relation to the land problem. They embraced two objectives, which again derive from his political principles: he sought for equality, or the elimination of gross inequality, of possession, and freedom in the use of land. In 1785, he proposed a redistribution through a progressive tax, with exemptions for small holdings.[43]

[36] "To John Taylor," *ibid.*, XV, p. 18.

[37] "To John W. Eppes," *ibid.*, XIII, p. 423. In this letter, he also cites Smith to support his contention that the proper quantity of money for the United States is between eight million and thirty-five million dollars. Jefferson held the quantity theory of money. *Ibid.*, XIII, pp. 410–11, 415.

[38] "To the President of the United States" (1792), *ibid.*, VIII, 343–44. Cf. the *magnum opus* of John Taylor, of Caroline, whom many historians believe to have written the only satisfactory criticism of Federalist economic doctrine: *An Inquiry into the Principles and Policy of the Government of the United States* (Fredericksburg: Green and Cady, 1814), pp. 244 f., 249, 280.

[39] "To John Taylor," *Writings*, XV, p. 18.

[40] "Against the Constitutionality of the Bank," *ibid.*, III, pp. 149–50, and "The Anas," *ibid.*, I, p. 291.

[41] "The Anas," *ibid.*, I, p. 277.

[42] To Albert Gallatin," *ibid.*, X, pp. 323, 436.

[43] *Writings*, XIX, pp. 17–18.

He opposed all feudal fees and proposed free distribution to settlers as a means of populating the country and of increasing its wealth.[44] In an interesting letter to Madison, he related his land policy to his political objectives. Just as he believed that government should be dedicated to the living and not to the dead, he believed no generation should encumber those to come with its methods of holding and using property. He opposed, for example, any generation accumulating debts beyond its ability to pay them, thus preventing it from placing its aggregate property holdings in lien to creditors. (This held, he said, for society in the aggregate; an individual could not deny a creditor's claim against inherited property.) Such debt accumulation would restrict the freedom of each generation to use its property as it wished. "The earth belongs in usufruct to the living," he declared. "On similar grounds it may be proved, that no society can make a perpetual constitution, or even a perpetual law."[45]

The first modifications in Jefferson's free trade policy were made in 1791 in his report on fisheries in which he proposed that the national government protect the fishing industry by a remission of duties on raw materials, by levying retaliatory duties on whale oil,[46] and by opening foreign markets to American fishery products. Jefferson considered such a policy was essential to the safeguarding of the American fishing industry from the hostility of Great Britain and to the building of a merchant marine that would be of value in time of war.[47] The report obtained a generally favorable response in the Senate, primarily because of its consequences for the maritime power of the nation.[48]

In 1793 Jefferson submitted his famous report on commercial policy to the House of Representatives. After reviewing the restrictions placed upon American exports by the different nations of Europe, he declared that two courses of action presented themselves. The United States could seek the removal of these restrictions by "friendly arrangement" with the various nations imposing them, or it could impose restrictions of its own in retaliation. He continued:

> There can be no doubt but that of these two, friendly arrangement is the most eligible. Instead of embarrassing commerce under piles of regulating laws, duties and prohibitions, could it be relieved from all shackles in all parts of the world, could every country be employed in producing that which nature has best fitted it to produce, and each be free to exchange with others mutual surpluses for mutual wants, the greatest mass possible would

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[44] *Ibid.*, IV, pp. 275–77.

[45] *Ibid.*, VII, pp. 454, 459. The intent here is somewhat ambiguous. To prevent any generation from living beyond its means is to prevent it from consuming its capital. This of course restricts its freedom to use its property as it will, and imposes the obligation at least to keep its capital intact. Many Republicans held such an idea of progress. Cf. Paine's *Agrarian Justice*.

[46] Britain levied a duty on importations of American whale oil and exported the oil of its own fisheries to the United States to be re-exported in American vessels. This retaliatory measure is significant as marking the beginning of Jefferson's policy of reciprocity.

[47] "On the Subjects of the Cod and Whale Fisheries, etc.," *Writings*, III pp. 139, 141.

[48] *Journal of Wm. Maclay*, ed. Edgar S. Maclay (New York: D. Appleton & Co., 1890), p. 384.

then be produced of those things which contribute to human life and human happiness; the numbers of mankind would be increased, and their condition bettered.[49]

A perfectly free commerce with the rest of the world should be the objective of American commercial policy, he stated. This can be realized through the negotiation of reciprocal trade agreements with other nations. But the United States should not give free commerce and navigation "in exchange for restrictions and vexations."[50] He proposed five methods of retaliation, to be exercised against those nations that refused to adopt "friendly arrangements" with America.[51] All of these methods were inspired by the mercantilist practises of European nations, particularly Great Britain, and they are as obviously mercantilistic in form as the practises that provoked them. The first, high duties, is of special interest, because Jefferson declared that they would have "the effect of indirect encouragement to domestic manufactures of the same kind [as the restricted imports]," and in time "may induce the manufacturer to come himself into these States, where cheaper subsistence, equal laws, and a vent of his wares, free of duty, may ensure him the highest profits from his skill and industry." He continued:

> And here, it would be in the power of the State governments to co-operate essentially, by opening the resources of encouragement which are under their control, extending them liberally to artists in those particular branches of manufacture for which their soil, climate, population and other circumstances have matured them, and fostering the precious efforts and progress of *household* manufacture, by some patronage suited to the nature of its objects, guided by the local information they possess, and guarded against abuse by their presence and attentions.[52]

This expression of protectionism may ring strangely against the prevalent notion of Jefferson as an agrarian, but before hastening to identify him with Hamilton it will be well to examine the expression more closely.

Jefferson's advocacy of protection was really incidental to his policy of reciprocity. Hamilton's program of protection had as its principal and exclusive objective the development of domestic manufactures; it was not combined with a commercial policy of reciprocity, nor was it an outgrowth of such a policy. This was one important difference between the two men on this point. (It is to be wondered whether Hamilton's "Report on Manufactures," submitted two years previously, had any effect on Jefferson, antagonistic as he was to Federalist economic policy. Although Hamilton's effort brought no immediate legisla-

[49] "Report on the Privileges and Restrictions on the Commerce of the United States in Foreign Countries," *Writings*, III, pp. 274–75.

[50] *Ibid.*, III, p. 276.

[51] *Ibid.*, III, pp. 278–81. The retaliatory methods proposed were: extremely high duties tending to prohibition; exclusion of foreign merchants from the United States; limiting national goods to national bottoms; recognizing as national vessels only those constructed within the nation whose flag they fly; and a boycott of the ships of all nations that refuse to admit American goods in American ships.

[52] *Ibid.*, III, p. 279 (italics in original).

tive action, it was obviously a state document of great importance and attracted immediate attention. Jefferson was curiously hesitant about submitting his report, which was written in compliance with a request of the House that had been made some two years previously and about two months after Hamilton had submitted his work.)

A second difference between the two positions is to be found in Jefferson's insistence that the power of protection be exercised by the state governments. Neither the political nor economic effects of Jefferson's protectionist program of this period could have been as important as those of Hamilton's program. The exercise of economic power by the state governments could not have been of any significance as long as the Union was to be maintained. Had the states exercised broad powers of allocation and distribution, the United States as an economic and political entity would have ceased to exist, and the condition of the country would have reverted to the near-chaos of the Confederation. The very condition of union and the very reason for the calling of the Constitutional Convention was the subordination of state power and the creation of a national state. (This must be asserted despite the fact that the nominal form of the government was a federation.) Jefferson's program in this period was consistent with his doctrine of the political importance of the states and with his doctrine of a minimum government. It removed the protection of industry from the province of the national government and placed it where its exercise could not have important political or economic consequences.

A third feature which distinguished Jefferson's program from that of Hamilton was the emphasis on the encouragement of household manufacture. Compared to Hamilton's objective of wide-spread industrialization, Jefferson's purposes were extremely modest. Small economic units were consistent with his ideal political state: originally he advocated self-sufficient agrarian units supported by household manufacture, and after 1790 he proposed a system of small farms engaging in free trade with the rest of the world or, failing this, the development of agrarian self-sufficiency through household manufacture. Jefferson's commercial policy of reciprocity, it may be noted, shows very visibly the influence of his early agrarianism. Reciprocity was designed to cultivate free trade, but also to protect America should it fail to achieve this goal. The principal way in which the policy was to protect America was by encouraging the development of household manufactures which would assist in making the small agrarian units self-sufficient.

Jefferson nowhere in his report explicitly stated that agrarian self-sufficiency was the real objective of his commercial policy. However, it is a reasonable deduction both from the report itself and from other of his statements made at that time and previous to 1790. Jefferson had a deeply rooted aversion to commerce from the days of the revolution to the beginning of the second crisis in British-American relations in 1807. This was really an opposition to the market and to exchange as a method of economic organization. Before 1790 he proposed agrarian self-sufficiency as an ideal form of organization, and after 1790 his greatest interest in addition to agriculture was household manufacture. Finally,

it may be observed that the methods of retaliation which he proposed would have had the effect of diminishing American foreign commerce almost to a vanishing point. To obtain needed manufactured goods, the United States would then, by Jefferson's proposal, have turned to state protection and, more importantly to household fabrication. It is conceivable, of course, that Jefferson's policy of retaliation might have forced Europe to open its markets to American goods. The more probable reaction of Europe would have been to adopt retaliatory measures against the United States. These would have been countered with more restrictions, and eventually commerce would have ceased. It may be noted that this is not sheer conjecture, for it actually happened after 1807 when Congress, acting on Jefferson's advice, adopted the Embargo and later the Non-Intercourse Act which brought to a complete cessation all lawful foreign commerce. (Smuggling was engaged in to some extent.) Ironically, these acts operated to promote nation-wide industrialization, which was just what Jefferson tried to avoid.

That Jefferson became aware of the diminishing reality of his ideal of agrarian self-sufficiency and came to accept the necessity of exchange is manifest in his writings after 1793. His commercial policy was not adopted by Congress, which accepted the Federalist position of equal treatment for all nations. Hamilton's fiscal and banking policy operated to unify the United States and to promote internal exchange, and it also pointed to greater interference by the government in national economic life. By 1801, Jefferson no longer dwelt upon the form of agrarianism explicit before 1790 and implicit in his report of 1793. In his first annual message to Congress, 1801, three important aspects of doctrine are discernible: Jefferson implied that agricultural specialization was most desirable (rather than agricultural self-sufficiency); he admitted the legitimacy of other forms of economic behavior, and he urged a policy of *laissez faire*. He declared at one point: "Agriculture, manufactures, commerce, and navigation, the four pillars of our prosperity, are the most thriving when left most free to individual enterprise."[53] Jefferson reiterated this position in 1804 in a letter which more explicitly states his new conception of the role of agriculture. He wrote that it would

> be better that all our laborers should be employed in agriculture. In this case a double or treble portion of fertile lands would be brought into culture; a double or treble creation of food be produced, and its surplus go to nourish the now perishing births of Europe, who in return would manufacture and send us in exchange our clothes and other comforts.[54]

In this same letter Jefferson explained his ideas concerning the population problem, which was one of his many special interests. He was in agreement with the Malthusian doctrine that, in most nations, the population increased geometrically while the means of subsistence increased arithmetically.[55] He ob-

[53] *Writings*, III, p. 337.

[54] "To J. B. Say," *ibid.*, XI, pp. 2–3.

[55] Of Malthus' essay on population, Jefferson wrote: "It is one of the ablest that I have ever seen." "To Joseph Priestley," *ibid.*, X, p. 447.

served the statistical verification of Malthus' premises in the figures of the second American census.[56] He denied, however, the general applicability of the doctrine, for he believed that in the United States the means of subsistence were adequate not only to satisfy the American people but also to alleviate much of the misery of Europe.[57] Jefferson's proposals respecting population did not change as significantly as the other aspects of his policy. In his *Notes on Virginia*, he urged that the immigration of skilled workers be encouraged by offering them special inducements, but he was reluctant to admit large numbers of them, believing that they would unsettle American conditions by overwhelming the country with European manners and morals.[58] He did not believe immigration would promote manufacturing, as Hamilton did, for after a while, the immigrants would "go to the plough and the hoe, but, in the mean time, they will teach us something we do not know."

III

Beginning in 1805 there was a pronounced change in Jefferson's economic policy. Both the early objective of agrarianism and the free trade which supplanted it were given over for a system of protection. The continued hostility of England and the Continental System of Napoleon forced a new assertion of national power from the United States at a time when the Republicans were in office. In his second inaugural address (1805) Jefferson revealed the progress that Federalist ideas had made within his own system and within the Republican party. Gone were the proclamations of a revolution in public polity that had ushered in the regime in 1801. In the first administration, Gallatin had attempted to execute a policy of strict economy in governmental expenditures, and Jefferson had attempted to relegate the state to the rank of a wise and tolerant overseer of economic behavior. Gallatin's policy of economy had effected a reduction in the size of the army and navy, instituted savings in the diplomatic and customs services, and reduced the national debt. The Jeffersonian administration between 1801 and 1804 was much more conducive to *laissez faire* than the preceding administrations, simply because the government exercised so few economic powers. But such an administration was destined for a short life. Even had there been no opposition within the nation, the turmoil of Europe would have forced a change.

Jefferson began his second administration by looking forward to the time when the public revenue would be freed from debt service in order that it might be applied "to rivers, canals, roads, arts, manufactures, education, and other great objects wthin each state."[59] Such a policy would first have to be legitimated by a constitutional amendment and probably would have to be executed in co operation with the governments of the states.[60] The promotion of American

[56] "First Annual Message, 1801," *ibid.*, III, p. 330.

[57] "To J. B. Say" (1804), *ibid.*, XI, p. 2, and "To David Williams" (1803), *ibid.*, X, p. 430.

[58] *Ibid.*, II, pp. 119-24.

[59] Jefferson, "Second Inaugural Address," *ibid.*, III, p. 377.

[60] *Ibid.* Three years before this address, Jefferson declared that the national government should "protect manufactures" but only those "adapted to our circumstances." This advocacy was purely rhetorical at the time (1802).

manufactures, however, did not wait for a constitutional amendment, any more than did the Louisiana Purchase. The embargo and non-intercourse policy after 1807 furnished more assistance to American manufacturing than the entire Federalist policy had been able to offer. Although the intent was to preserve American neutrality in the Napoleonic Wars, the effect was not out of harmony with Jefferson's new economic position.

In these later days, Jefferson devised an economic policy which he thought would establish a "national equilibrium" between agriculture, manufactures, and commerce; such a policy would "simplify" the economic organization of the United States and restrict economic activity to meeting simple needs, and it would make the United States self-sufficient and removed from the turmoil which international economic relations engender. He declared that the embargo and related policies had promoted domestic manufactures:

> They will have hastened the day when an equilibrium between the occupations of agriculture, manufactures, and commerce, shall simplify our foreign concerns to the exchange only of that surplus which we cannot consume for those articles of reasonable comfort or convenience which we cannot produce.[61]

Jefferson also proposed that all raw materials produced in the United States be worked into manufactured commodities rather than be exported, in order to lessen the nation's dependence on the rest of the world. His opponents charged that this was a "Chinese" policy of commerce, which indeed it was.[62] To avoid the embarrassment of advocating that which he had once decried—a manufacturing system—Jefferson urged that Americans concentrate on household fabrications as a complement to their agricultural pursuits. Indicating that he was aware of the dilemma, his letters between 1810 and 1815 reiterate the virtues of household manufactures.[63] These, he said, would beget diligence and self-reliance among the citizenry and remove them from the caprices of the market, and would make the United States economically independent of the rest of the world. He repeatedly urged that all foreign (particularly British) goods imported into the United States be boycotted (with the exception of extreme necessities). Jefferson himself established an extensive spinning mill at Monticello.

Yet the course of American industrial growth during the years of conflict with Britain, from about 1807 to 1816, were not marked by such a development. Although many household manufactures were introduced these were insignificant beside the larger scale industry that developed under the protection furnished by the war. And the rising class of manufacturing entrepreneurs viewed the development very differently from Jefferson. Eventually Jefferson abandoned his insistence on household manufactures and accepted the inevitability of the factory system. When the war with Britain finally closed in 1815, so many vested interests had develcped that the protective tariff of 1816 was vir-

[61] To the Democratic Republican Delegates from the Township of Washington County, etc.," (1809), *ibid.*, XVI, 355–56.

[62] Many years earlier Jefferson advocated such a policy in the very same terms and its intent was not essentially different from his later program. See above, p. 269.

[63] *Writings*, VIII, p. 352; XII, p. 294; XIII, pp. 122, 123, 170, 207.

tually a foregone conclusion. Substantial and very vocal opposition was voiced to it, but this was of no avail against the legacy of the war and the incessant clamors of the protectionists for still higher duties.[64]

After he had retired to Monticello, Jefferson looked wistfully back upon the years between the Declaration of Independence and the peace of 1815. The free traders had taken up the pre-1790 Jefferson to advance their case. He wrote in 1816 to Benjamin Austin that he had once believed in free trade,

> but who in 1785 could foresee the rapid depravity which was to render the close of that century the disgrace of the history of man?
>
> . . . .
>
> We have experienced what we did not then believe, that there exists both profligacy and power enough to exclude us from the field of interchange with other nations: that to be independent for the comforts of life we must fabricate them ourselves. We must now place the manufacturer by the side of the agriculturist . . . Shall we make our own comforts, or go without them, at the will of a foreign nation? He, therefore, who is now against domestic manufactures, must be for reducing us either to dependence on that foreign nation, or to be clothed in skins, and to live like wild beasts in dens and caverns. I am not one of these; experience has taught me that manufactures are now as necessary to our independence as to our comfort; . . .[65]

One may say he looked back wistfully, for in this same letter he again reiterated his faith in the superiority of agriculture, in its supremacy over manufacturing, and in the bounty of the earth.

It was not only in international economic policy that Jefferson adopted Federalist methods. His program of subsidizing domestic industry and of giving the national government the direction of internal improvements was similar to the policy of the Federalist party. It differed from it in theory in that Jefferson insisted upon a constitutional amendment as a prerequisite to the exercise of the latter power, which he was almost forced to do in view of his past strictures on the unconstitutionality of Hamilton's measures.

Over the years Jefferson gradually abandoned his categorical opposition to monopoly. He had written in 1785 that monopoly was "contrary to the spirit of trade, and to the dispositions of merchants,"[66] yet even then he recognized that governmental grants of monopoly privileges could be of advantage. He remarked on the question again in 1787 in considering the problem of exclusive rights in patents. Government interposition in such matters was of great value, he wrote, but "in practice so inseparable from abuse that it is best to leave citizens free in their pursuits with neither aid nor hindrance."[67] A few years later he declared that the constitutional provision for exclusive patent rights had "given a spring to invention beyond my imagination."[68] Eventually Jefferson

[64] See the interminable tracts of Matthew Carey who was never satisfied with the level of duties regardless of their magnitude.

[65] *Writings*, XIV, 390, 391–92.

[66] "To the Count de Vergennes," *ibid.*, V, pp. 69–70.

[67] "To Monsieur L'Hommande," *ibid.*, VI, p. 255.

[68] "To Benjamin Vaughan" (1790), *ibid.*, VIII, p. 50.

settled upon the compromise of giving the inventor an exclusive grant but prohibiting him from imposing any conditions upon the user of the invention.[69] What he wanted essentially was the increased incentive resulting from monopoly grants without the ill effects of monopoly.[70] In conditions where free enterprise was unable to function, Jefferson approved of exclusive grants of trade. An instance of this was his approval of John Jacob Astor's plan to open fur trade in the Columbia River territory. He wrote to Astor, the founder of the famous family, "Your name will be handed down with that of Columbus and Raleigh, as the father of the establishment and founder of such an empire," (which would arise from commerce). And while Astor was providing for future generations, Jefferson hoped that he might "find a present account in the just profits you are entitled to expect from the enterprise."[71] The generous tone of the letter is remarkable in view of Jefferson's ill-concealed dislike of "millionary merchants."

IV

In recapitulation, an examination of Jefferson's papers and their relation to the economic problems of the United States between 1774 and 1816 reveals not one Jeffersonian system of economic policy but three. Until about 1790 he was dominated by agrarianism, and his expressions of policy most often took the form of advocating self-sufficient agrarian units. From 1790 to 1805, Jefferson formally adopted *laissez faire* as an objective but his expressions were still tinged with the earlier form of agrarianism. After 1805, he proposed measures that were consistent with the objectives established by Hamilton, though his methods differed from those of Hamilton in revealing a greater concern with constitutional legitimacy. That these periods in Jefferson's policy have not been distinguished and that he is most often categorized as a Physiocrat (for which, as we have seen, the evidence is unsatisfactory) is not difficult to understand. His stature as a statesman and political thinker makes him vulnerable to wilful interpretations. No little violence has been done to his ideas in the past century or so. Even after his declaration of 1816 in favor of protection, the Southern free traders continued to claim him as their own. Nor could the protectionists agree on what he said or what he meant. Matthew Carey castigated him for romantic agrarianism while Friederich List set him at one with Hamilton.

This three-fold development in Jeffersonian economics might suggest fundamental inconsistencies in his system of thought, and in one important aspect it does. Before 1805 he could very easily harmonize his minimum state with his economic policy, for the policy required no great concentration of power. After 1805 serious difficulties arose, however, over the compatibility of state and individual power in relation to the avowed economic functions of government. Because the international economic policy of the state cannot be separated from its domestic policy, the problem of protection cannot be viewed differently from the question of internal improvements. Here Jefferson's logic was impaled.

[69] "To Dr. Thomas Cooper" (1815), *ibid.*, XIV, p. 174.
[70] Cf. the letter to Oliver Evans (1807), *ibid.*, XI, pp. 200–202.
[71] "To John Jacob Astor," *ibid.*, XIII, pp. 432 f.

He was alarmed by Federal power over internal improvements, even though he admitted the power of protection. In the constitutional controversy of the 'twenties, he submitted to Madison a "Solemn Declaration and Protest of the Commonwealth of Virginia, on the Principles of the Constitution of the United States of America, and on the Violations of Them," which condemned internal improvements under direct or indirect Federal auspices but said not one word on protection. This artificial separation was forgotten in the resolutions actually passed by Virginia.[72] However anomalous this declaration is in a political sense, it is significant as Jefferson's last pronouncement on economic policy, revealing that he maintained his advocacy of protection to the end.

[72] Cf. Jefferson's draft, *Writings*, XVII, pp. 442–48, with the resolution adopted by Virginia, in *State Documents on Federal Relations: The States and the United States*, ed. Herman V. Ames (Philadelphia: University of Pennsylvania, 1900–06), pp. 141–42.

THEORY OF WAGE CONTROL IN THE TRANSITION PERIOD

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The desirability of extending Federal control over wage rates throughout the period of transition from war to civilian products rests on various considerations, practical as well as theoretical. The purpose of this paper, however, is to consider this question in its theoretical aspects alone: more narrowly, to point up the relevance of neo-classical and Keynesian theory to the problem of wage control in a period characterized by substantial unemployment.[1] That the transition period will be one of substantial unemployment is a hypothesis, the basis for which is herein indicated.[2]

I

Unemployment in the transition period, initiated by curtailments of war production, would not be too distressing if it could be quickly and significantly reduced by the process of reconversion. But the list of the more obvious and inevitable delays before peacetime production can get under way is impressive: machines must be retooled, industries relocated, workers retrained and re-migrated; and an accumulation of technological innovations, only theoretically sound, must be put to the test of experience.

Transcending any one of these impediments to re-employment, perhaps all of them combined, is the clear probability of a decline in the national income as war production is curtailed. This probability can be dismissed only on the acceptance of a series of assumptions that reconversion during the transition period will quickly lead to re-employment *and continued employment* of all workers made idle by contraction of the war economy; that the total labor force will be as large as that utilized in the all-out war against Germany and Japan, and that hours of employment will not be reduced; *or* that the volume of new public spending will be great enough to offset any reduction in government war expenditures made possible by cutbacks. This is a pie-in-the-sky dream that we need not demonstrate to be theoretically impossible; it is enough to note that its realization would depend on a combination of fortuitous and highly unlikely circumstances. A quite different set of circumstances appears likely: national income will fall because, to mention only some of the more obvious factors in-

[1] For a less theoretical analysis of the advisability of extending the wage-stabilization program throughout the transition period, see the present authors' article, "Wage Control in Wartime and Transition," *American Economic Review, June 1945.*

[2] The transition period is defined as that interval of time during which war production falls to a level beyond which further curtailment does not occur. It is not meant to cover the time period necessary to overcome the unemployment occasioned by curtailment of war production since, conceivably, that unemployment may become a "hard core", lasting indefinitely.

volved, hours of work will be reduced, overtime at premium rates will be less prevalent, workers will be shifted to lower paying industries, and some workers will voluntarily quit the labor market. The contraction in national income due to factors of this kind may perhaps be discounted since they reflect conditions other than that of involuntary unemployment. Insofar as national income declines beyond the degree attributable to these factors, however, actual unemployment would presumably result; and re-employment presumably would be impeded until national income once more expanded.[3]

It is impossible in this paper to analyze the entire situation arising from a reduction in government war expenditures, beginning with the defeat of Germany. It appears probable, however, that this reduction in the national income will be an amount greater than that attributable alone to such factors as a reduction of the work-week, voluntary withdrawals from the labor market, etc. To put the matter differently: if all workers who might quit the labor market in the transition period did so now, if the work-week were now reduced to forty hours, etc., the decline in national income brought about by factors of this kind would presumably be less than the decline attributable to a contraction in government expenditures as war production is curtailed. Furthermore, it cannot be presumed that this decrease in national income would be offset *simply as a result of reconversion*. Let us assume the simplest possible case of reconversion. A shoe manufacturer sold his product on government contract. That contract is cancelled at the beginning of the transition period. The manufacturer reconverts, i.e., continues to produce shoes, but now for a civilian market. Reconversion is successful in the sense that his entire output finds a market at the same price as that for which it was formerly sold on government order. Thus, the decrease in government expenditures for shoes has been exactly offset by the increase in civilian expenditure for the same commodity. But insofar as civilian expenditures for shoes increase, civilian expenditures for other products must decrease.[4] Net civilian expenditures have remained constant, government

[3] We are assuming, rather than demonstrating, that a drop in the dollar national income beyond that due to such factors as shorter work-week, etc., would cause unemployment and impede re-employment. It could, of course, be argued that the decline in the national income need not cause unemployment or impede re-employment, given a system of flexible prices, effective competition, etc. But it seems to us unrealistic to anticipate conditions of this kind, especially in the transition period.

[4] Except insofar as the decline in the national income is offset by such factors as increased rate of spending, expansion of bank credit, dis-saving, etc. However, there is nothing about the fact of reconversion which necessarily impels these income-increasing factors to manifest themselves. Reconversions could take place, only to be followed by plant shutdowns; indeed, would be followed by shutdowns unless purchasing power were adequate to support the volume of employment contemplated by these reconversions.

Note, also, that a decline in government expenditures means initially a decline in the volume of corporations' sales and therefore corporations' net incomes. The volume of dividends will therefore tend to decline. But even before this decline, stockholders' incomes were not entirely spent or invested, i.e., they may have been "saved" without a consequent expansion of investment. In other words, a reduction in government expenditures may result simply in a reduction in stockholders' dividends, rather than in effective national income.

expenditures have decreased; and, therefore, the national income has declined by an amount exactly equal to the reduction in government expenditures. Though reconversion has been effected, unemployment will presumably ensue as a result of the decline in the national income; and the incidence of this unemployment will be distributed elsewhere than in the reconverted establishment. It appears, in other words, that the casual assumption that reconversion not only provides jobs, but continues to provide them, is fallacious.

It should not be inferred that a decline in national income cannot possibly and eventually be offset. Thus, dis-saving, a reduction in the rate of saving, an expansion of private bank credit, or an increase in government expenditures for veterans' aid—these and other measures might in time restore the national income to a level high enough to assure jobs to all those who want them. But there is simply no reason to believe that the impact of these measures will *necessarily* be great enough, or manifest itself quickly enough, to offset the decline in national income to an extent sufficiently great to provide full employment. The net reduction in the national income, whatever its magnitude, would be an unemployment-creating and re-employment-impeding factor.

We are faced, then, with the fact of initial unemployment immediately after cutbacks; the prospect that re-hiring may be delayed as a result of technological impediments, such as retooling; the possibility that the decline in the national income due to a contraction in war expenditures may not be sufficiently offset, or offset quickly enough, to prevent involuntary unemployment. All of these considerations, it appears to us, add up to the certainty of considerable unemployment during the transition period, and they suggest that unemployment caused initially by cutbacks may become cumulatively worse for some time after the defeat of Germany.

II

On the assumption of substantial unemployment in the transition period, it reasonably follows that the termination of government control over wages would lead to a greater than otherwise decline in the wage level. This is true since unemployment has generally operated in the American economy as a potent wage-reducing factor, the impact of which, however, can at least somewhat be offset by government controls.[5]

We must, then, meet this problem: would a reduction in the wage level enhance or impede employment opportunities in the transition period?

The general position of neo-classical theory, which is pertinent to this problem, may be summarized as follows: The central economic problem is the theory of value, an extension of which is the theory of distribution. Value theory is analyzed with reference to a specific industry—sometimes, initially with reference to a single firm in an industry. In a perfectly competitive market, the value of a product tends to equal its costs of production, while the agents of

[5] Government wage control can be directed, as is now the case, toward stabilization of a wage level within which specific wage-rate fluctuations in certain industries and occupations are permissible.

production have a value (cost) imputed to them in accordance with their contribution to the product (generally explained by the marginal productivity theory). The price of a product is its value expressed in money terms. In the short run, price may be above or below costs of production, a condition which invites expansion or contraction in the supply of the product until the supply is such that, in conjunction with demand, a price equal to costs results. The same general pattern of analysis is applied to the theory of value and distribution under conditions of imperfect competition. Under these conditions, however, the operation of economic forces may permit a long-run disparity between price and costs.

Furthermore, the neo-classical analysis either assumes a constant price level or accepts price-level fluctuations as simply an element obstructing the determination of long-run individual values. The real point for our purpose is that the whole theory of value and distribution is arrived at by an industry-by-industry or firm-by-firm basis, and can be expressed with only a footnote type of reference to price and income levels. It is, of course, true that neo-classical economists do discuss price- and wage-level fluctuations, but the implication of their discussions is that these fluctuations may be regarded as a consequence of forces other than those explaining the value or price of a particular product.

The contribution that neo-classical analysis can make regarding wages or any cost of production is embodied in the theory of distribution, itself derived from the theory of value, wherein is analyzed the demand and supply forces which determine these costs. Wages are thought of as a payment made by an individual enterpriser as a means of securing an agent of production, and it is the payment made by the individual enterpriser which determines employment opportunities in his firm. In a given state of the arts and at any given wage, X number of workers can be employed by Y firm; X *plus* at a lower rate; the difference between X and X *plus* being determined by the elasticity of the demand for workers in Y firm, which elasticity in turn is largely a derivative of the demand for the product of Y firm, and the relative proportion of labor to other agents of production. Since the elasticity of demand for labor relates to the elasticity of the demand for the product, the neo-classical theory must imply a virtually constant wage level. For obviously a decrease in the wage level, by affecting total incomes, would cause a movement of the demand curves to the right or left; and at the lower wage level, in relation to the new demand curves, the volume of employment in any particular firm and in industry as a whole would not necessarily be greater than before the wage-level cut. The conclusion is clear that as a result of a decrease in the wage rates of a single firm, other things remaining equal, employment would generally expand; but as a result of a drop in the general wage level, which means that other things necessarily cannot remain equal, the effect on employment in industry as a whole is not demonstrable by neo-classical theory.

The neo-classical theory of wages, however, has interesting correlaries regarding wage rates in specific industries and occupations, rather than wage levels. Thus trade unions are regarded mostly as labor monopolies which raise rates

in particular industries and occupations, and thereby diminish the volume of employment in those industries and occupations. The effect of these high monopolistic rates is to cause higher product prices (not higher price levels) than would otherwise exist. The effect also is a maldistribution of manpower, since its distribution industry-by-industry and occupation-by-occupation is controlled arbitrarily rather than competitively, so that the total productivity of all employed labor is diminished. And the solution offered by neo-classical economists to the uneconomic distribution of a scarce agent of production is the enforcement of competition, i.e., the effectuation of wage decreases and wage increases, until a given classification of labor receives the same remuneration from all enterprisers.[6]

The fact that neo-classical analysis does not relate significantly to the problem of wage levels does not, however, destroy its usefulness as a tool of analysis for the problem of specific wage rate adjustments. For whatever the level of wage rates may be, whether this level is controlled governmentally or competitively, specific and continuous fluctuations within it are likely to be imperative. Relative to a given wage level, some wage rates may be too high, others too low. The real contribution of neo-classical theory is that of emphasizing the necessity for specific wage reductions and specific wage increases.

But toward an answer to the question as to whether the wage level should be controlled or permitted flexibility, neo-classical theory is of no practical assistance. That analysis is generally related to the problem of individual value determination—not the problem of price-level or wage-level determination; where the analysis is related to both individual values and price or wage levels, the determinants for each are presumed to be different. Unfortunately this dichotomy of theoretical observations has not always been followed by economists when faced with "practical" problems requiring immediate solution. Thus, in dealing with business depressions, some neo-classical economists have argued that a fall in wage levels would improve the profit situation and thereby induce enterprisers to expand production and employment. This conclusion may or may not be valid, but in any case it is certainly not demonstrable by a theory which ignores the effects of wage-level fluctuations on the size of the national income.

It is precisely the effects of wage-level fluctuations on the national income, however, which the Keynesian analysis takes into account. Its theoretical findings, therefore, form a useful hypothesis against which to appraise the problem of wage control in the transition period.

[6] The enforcement of competition is of course consistent with—is, in fact, the essence of —a positive program of *laissez faire*. It should be noted, however, that while enforcement of competition is generally advocated by neo-classical economists, this advocacy does not inevitably stem from their theoretical analysis. It is quite consistent, for example, to be both a Marshallian economist and a socialist, since orthodox theory can serve to indicate the operation of economic forces under both a free and controlled system. By the same line of reasoning, a neo-classical economist could endorse government control of wage levels.

Keynes' general position regarding the relation of a wage-level reduction to the volume of employment may be summarized as follows: "... the reduction in money-wages will have no lasting tendency to increase employment except by virtue of its repercussions either on the propensity to consume for the community as a whole, or on the schedule of marginal efficiencies of capital, or on the rate of interest. There is no method of analyzing the effect of a reduction in money-wages, except by following up its possible effects on these three factors."[7]

The repercussions on these three factors, in turn, depend on the extent to which the reduction in money-wages affects prices, incomes (money and real), volume of investment, terms and balance of trade, schedule of liquidity-preferences, enterprisers' level of confidence, etc.[8] Upon analysis of these variables, Keynes comes to this position: "There is, therefore, no ground for the belief that a flexible wage policy is capable of maintaining a state of continuous full employment;—any more than for the belief that an open market monetary policy is capable, unaided, of achieving this result. The economic system cannot be made self-adjusting along these lines.[9]"

It should be emphasized that Keynes admits the possibility that a reduction in the wage level would increase the volume of employment *initially*. He points out that the individual enterpriser, seeing his own costs reduced, might overlook the repercussions on the demand for his product and act on the assumption that he may be able to sell at a profit a larger output than before. But Keynes concludes that this initial expansion of employment may be temporary. Employment will in fact fall back to its previous level, unless employers' expectations of profits are realized. These expectations, however, will be realized only "if the community's marginal propensity to consume is equal to unity, so that there is no gap between the increment of income and the increment of consumption; or if there is an increase in investment, corresponding to the gap between the increment of income and the increment of consumption, which will occur only if the schedule of marginal efficiencies of capital has increased relatively to the rate of interest. Thus the proceeds realized from the increased output will disappoint the entrepreneurs and employment will fall back again to its previous figure, unless the marginal propensity to consume is equal to unity or the reduction in money-wages has had the effect of increasing the schedule of marginal efficiencies of capital relatively to the rate of interest and hence the amount of investment. For if entrepreneurs offer employment on a scale which, if they

[7] Keynes, *The General Theory*, p. 262. Note, however, that Keynes' position appears to be fundamentally similar to neo-classical economics regarding the relation of specific wage-rate changes (rather than the wage level) to the volume of employment. "There are advantages in some degree of flexibility in the wages of particular industries so as to expedite transfers from those which are relatively declining to those which are relatively expanding. But the money-wage level as a whole should be maintained as stable as possible, at any rate in the short period." P. 270.

[8] In this respect, Keynes' analysis is diametrically different from the neo-classical school, since he assigns primary importance to a whole series of possible repercussions arising from an initial change in the economy.

[9] Keynes, *The General Theory*, p. 267.

could sell their output at the expected price, would provide the public with income out of which they would save more than the amount of current investment, entrepreneurs are bound to make a loss equal to the difference; and this will be the case absolutely irrespective of the level of money wages. At the best, the date of their disappointment can be delayed only for the interval during which their own investment in increased working capital is filling the gap".[10] This analysis relates significantly to that made earlier in this paper: i.e., that the re-employment brought about by reconversion might be temporary in character.

III

Both the neo-classical and the Keynesian analyses have practical significance regarding the relation between the volume of employment in any specific industry or occupation and wage adjustments therein. Both indicate the necessity for specific wage fluctuations within the wage level.

Neo-classical theory, however, has no conclusion serviceable for practical policy regarding the relation between wage levels and employment; and furthermore, can develop none as long as its scope of analysis is restricted to static conditions. On the other hand, Keynes' analysis, made in terms of the effects of a wage-level reduction on various economic variables, provides a theoretical framework adaptable to the problem of wage control in the transition period.

The Keynesian analysis suggests that a declining wage level during a period of unemployment does not generally induce an expansion of job opportunities. If this conclusion is correct, the economic case for government maintenance or stabilization of the wage level during the transition period is strong. For a fall in the wage level, unaccompanied by an expansion of employment, would presumably lead to a decline in the national income[11]—a decline which economists generally regard as unemployment-causing or re-employment-impeding.

[10] *Ibid*, p. 261.

[11] While it is theoretically possible that a reduction in the wage level, employment remaining constant, could in the first instance lead simply to a redistribution of income in favor of enterprisers and other groups, the national income would nonetheless shortly fall. The sudden enrichment of non-labor groups at the expense of labor is likely to decrease the volume of expenditures on consumers' goods and therefore employment in consumers' goods industries; and there is little likelihood that this diminution of employment in consumers'-goods industries will be offset entirely by an expansion of investment and therefore employment in investment-goods industries.

BOOK REVIEWS

Freedom under Planning. By Barbara Wootton. Chapel Hill: The University of North Carolina Press, 1945. Pp. vii, 180. $2.00.

Mrs. Wootton's book is written mainly to challenge and refute Professor Hayek's *Road to Serfdom*. She concerns herself chiefly with his assertions to the effect that the planning of an economy is inevitably totalitarian and destructive of freedom. Hence, a review of *Freedom under Planning* has to extend somewhat to *The Road to Serfdom*. The indictment of planning in the latter is carefully drawn, and thoroughly reasoned. It deserves challenge and competent criticism. Wootton undertakes to do a part of this task in a manner that is "earthy" and "practical." She does this with competence, breadth, good sense, temperance, and with the courage frankly and squarely to state factors that embarrass her position. Her book is useful and important.

There are many who are merely leftish, or puzzled, or who reluctantly believe "planning" inevitable but whose fears mount as the history of fascism, nazism and Russian communism is revealed. Wootton's book will be a boon of comfort to them. Wishful thinkers and the timid will not be willing to read it critically. For them it will be enough that someone of standing and competence, apparently fearing totalitarianism and not a dogmatic socialist, gives assurance that, though there is danger, we really might have planning and still not lose our freedoms, at least not many, and not the most important. But to the liberal, now sometimes called reactionary, who reads Wootton's book thoughtfully and critically, it seems substantially to confirm Hayek's thesis. Why this is so will be briefly shown later. To those who do not believe planning is inevitable, this will be encouraging, for they will hope that adequate attention to the warnings of Hayek will change the trend. But to others, who think planning is probably inevitable, Wootton's confirmation of Hayek will be depressing.

The question of the inevitability of planning is not discussed by Wootton, but is by Hayek in what I regard as his weakest and most vulnerable chapter, "The 'Inevitability' of Planning." The question is relevant here, because the significance of Wootton's as well as Hayek's book is much affected. For, if planning is inevitable then the pessimist will accept it as involving serfdom; and the optimist will hope that invention, innovation, discovery of new ways of men, may avert the impending disaster. Wootton will inspire that hope.

We may infer that Wootton does regard planning as inevitable, for she says (Chapter I): "If Miss Jaeger is right and *any* plan is incompatible with the chief economic, political and civil freedoms, then the problems concerned with the differences between one plan and another are not worth discussing. *We are sunk anyway*" (my emphasis). But although Wootton does not directly attack Hayek's denial of the inevitability of planning, in Chapter IV she does attack the possibility Hayek regards as the true alternative, i.e., a full and free competition. She says: "And to crown all, we have no reason to suppose that anything approaching this régime of perfect competition exists, or has ever existed

or is likely to exist. On the contrary, all the evidence shows that we are travelling away from it." And later: "But, for technical reasons, the shape which modern industry has taken is ill-adapted to a world of genuinely open and free and universal competition." Again: "The weakness of the thorough-going critics of conscious determination of economic priorities is that they constantly compare an ideal, theoretical consumer-sovereignty (in which demand corresponds precisely to desire and all production is competitive) with the actualities of planning in a world of flesh and blood and imperfect institution." In a note to this last sentence she says: "This defect seems to me to underlie the whole thesis of books like Professor Hayek's *Road to Serfdom*.... The alternatives are not planning or Utopia; they are planning, for better or worse, and a planless world to which very serious exception can be taken on good grounds...." In this Wootton has, in my opinion, far the best of the argument. Hayek's position seems dogmatic and unrealistic.

Wootton means by "planning" the conscious determination of "economic priorities" by public authorities, with primary emphasis upon production. The protagonists of such planning assume that "objectives exist which can properly be described as for the benefit of all," and that these objectives can be ascertained with reasonable accuracy. However, Wootton asserts that "no plan can give people what they want as distinct from what somebody else thinks they want, or ought to want" and that the problem of the common good in any scientific and quantitative sense is insoluble. This may amaze and disconcert many advocates of planning. It is the basis of Wootton's position that planning is a matter of degree. The implication is that what is the proper degree depends upon how much freedom of one kind we are willing to give up to gain freedom of another kind. If *either* the extreme conservative position, as represented by Miss Jaeger (or Hayek) *or* the extreme left position, as represented by Harold Laski is right (either, Wootton says, *could* be right) then simultaneous enjoyment of economic, civil and political freedoms is impossible. So far as this goes, Wootton shows undogmatic open-mindedness and common sense. However, it leaves open for further inquiry whether, once a system of planning is in effect, it can or will be operated by authorities consistently with some generally acceptable degree of planning. To Hayek, on the basis of history and experience and the avowed judgment of important socialists, this is impossible; Wootton counters with respect to several categories of freedoms (with two exceptions) that it *could* be done although how is not yet always demonstrable.

The first of these categories is that of cultural freedom—freedom of thought, speech, art, religion. One gets the impression that Wootton would sacrifice planning if it requires control of culture. She grants that economic planning does put the planners in a position to destroy cultural freedom. She says (Chapter II): "The problem of planning for freedom thus resolves itself into the problem of determinate planning for indeterminate cultural ends. Stated thus it sounds insoluble." But, she thinks, practically it is soluble if certain conditions are observed. She thinks "the critical point is this business of *knowing* where to stop" (my emphasis). Also: "The second condition of successful

economic planning for indeterminate cultural ends is that the planners should show a nice discrimination in their methods." It seems that in this section the logic is rather confused, the terms contradictory, the thinking wishful. It is conceivable, I grant, that it is possible to plan for no cultural ends and without restricting cultural freedom, but it has not yet been done. Wootton states (Chapter II) that "the U. S. S. R. offers the one and only example of really comprehensive planning in time of peace which the world has ever seen. Throughout this experiment the degree of both civil and cultural freedom has been intolerably low" because "the Soviet plans have, however, from the beginning been avowedly devoted to promotion of specific cultural ends . . . ," the very thing she says should not be done.

In this part of the argument I think Hayek wins. However, neither Wootton nor Hayek evinces more than a superficial knowledge of the sociology of organization or practical understanding of organization management. What Wootton neglects and Hayek does not emphasize is that planners make errors, that in a régime of planning, knowledge of errors destroys confidence, that without confidence plans are in danger of not being executed, that change of planners may disrupt planning, and be destructive of its organization. Men may be *driven* by the responsibilities involved to interfere with cultural freedom where *they* think necessary because they see social chaos if their plans are changed except as they find changes advisable and practicable.

The second category of freedoms comprises "civil rights concerned with the method of enforcement of the law, and the position of the actual or supposed lawbreaker" i.e., trial by jury, habeas corpus, etc. These, Wootton thinks, are least likely to be threatened by economic planning, and says: "Even Professor Hayek does not specifically suggest that these are in danger." So she spends some time explaining why Soviet history in this respect is not probative or conclusive. But the reflective reader, remembering also Germany, Italy and Turkey, will be reminded that under planning, administrative rules and decisions supersede largely both the law and the concept of civil rights so far as concrete behavior is concerned. Even in the United States before the War, it was increasingly true that men were denied even the right to employment by administrative decision; and the use of the mails is a privilege, not a right, that may be denied at least in some circumstances by administrative decisions not appealable to the courts. As planning increases, the area of this kind of regulation has to increase. It may be used, as it has been, to deprive men of the right to food or shelter or livelihood without formally abrogating any constitutional rights.

And now we come to the economic freedoms. Wootton divides them into two groups, the freedoms of consumers and those of producers. Each of these groups is again subdivided.

First comes freedom of choice as to immediately offered goods. The best system here is just plain money freedom: you buy what you will with the money you have. This may be qualified by a point-stamp system described as it has been operated in Great Britain, and by rationing. But our author does so hope planning will permit simple money choice. In peace times this does not seem to be an excessive hope, at least for the richer countries.

Next comes that peculiar abstract kind of freedom known by the orthodox economists as "consumers'-sovereignty." This means, I think, the effect of free choice in the market upon the relative and to a considerable extent the absolute production of various goods, of kinds both already produced and *those potentially producible.* Wootton gives a quite elaborate popular exposition of the economic theory of consumers'-sovereignty. She shows that this is an exaggerated notion, because prices and corresponding costs have to be taken into account and competition has to be really free for the theory to be good; and it isn't that kind of a world anyway. If it were, the individual consumer would not know he was effecting any control of production and so would not miss the freedom of his "sovereignty" if he had none. Now the reason stated for this "somewhat abstract discussion" is that consumers'-sovereignty is "one of the chief arguments used by those professional economists who are opponents of planning." In agreement with the economists Wootton plumps right out with, "You can't have consumers' sovereignty and planning." This freedom has to go; but she says this freedom is a fake and worth nothing anyway. In effect, that is, Hayek is right, but the point is not worth being right about. It is here that I think Wootton is least realistic and not quite awake. One only has to have observed what the women of Moscow would do to get shoes or stockings in the 1930's while the subway was being decorated in marble onyx and stainless steel to get the point; or to observe the force of the desire for "good will" on the actual behavior of producers. So far as she goes I think Wootton's economic analysis is sound. It seems to me she just couldn't bear to go far enough. And so she enunciates these "classic" sentences: "It can hardly be said that people greatly prize a freedom the nature of which they do not fully understand and the absence or presence of which they would not even recognize! These last few words are important. The real reason why full consumer-sovereignty is not a matter that people trouble about is that they are generally unaware whether they have freedom or not." Similar statements could be made of the freedoms of the bill of rights, but they seem irrelevant to the issue.

Next is the freedom of the consumer to buy *when* he wants to, i.e., his freedom to save. In very simplified form we now are presented with what I take to be the Keynesian doctrine. There cannot be freedom here but "happily there is every reason (sic) to *hope* (my emphasis) that this conflict between consumer liberty and producer security can be resolved: and resolved without grave interference with the consumer's liberty to spend as he pleases . . . . The road out of the difficulty lies not through dictating to the consumer when he may or may not spend his money; but through the state undertaking both to make good the deficiencies, and to compensate for the vagaries, of consumer spending." She fails to discuss whether what the state does involves dictating to consumers through taxes and other interferences, or indirectly by some form of arbitrary inflation or deflation.

And so we come next to Chapter VI which begins the exposition with respect to producers' freedoms. The first of these is freedom of choice of employment. The suspension of such freedom in Britain during the War has taught its importance. "Choice of employment is a fundamental liberty." But we learn for

the first time that the primary object of planning is full employment, defined as a condition where there are more vacant positions than applicants to fill them. The *right to be employed* complicates the granting of *choice of* employment as a fundamental liberty. For it is understood that the practical conditions of planning must recognize the need of increasing and decreasing employment in the various productive enterprises. How, then, does the planner accomplish the shifts while still leaving freedom to choose what one will do and where, and in what particular job one will or will not work? How does one deal with those unwilling to work, those unwilling to shift, and those not willing to stay put? The answer is: by force of either legal or economic sanctions or inducements. Wootton places great emphasis on economic inducements to control the distribution of labor as granting the maximum freedom, or sense of freedom, because it is less personal than the application of legal sanctions. Her analysis of the elements of freedom of choice of employment is admirable and her exposition of economic incentives especially as related to unemployment insurance and subsistence relief in Britain is illuminating. Nevertheless, though all these words may soften, they cannot avert the blow: either you order men to work when and where plan requires it, or you fix economic incentives and penalties that induce them "voluntarily," as under the non-planned system, to do the equivalent. The latter method clearly offers the greater freedom; but to work it the planner must control the incentives. If this degree of freedom of choice of employment is granted it is inescapable that freedom of bargaining must be denied.

This dilemma is candidly set forth though with some rationalization and considerable embarrassment, as I read it, in Chapter VII, "Freedom of Collective Bargaining." A few quotations will suffice. "With a free choice of employment every pattern of production implies a corresponding pattern of wages." "It is in fact the business of a Union to be anti-social." "Blame for the consequences of the anti-social policies of sectional organizations like Trade Unions lies, not upon the societies themselves, but upon our practice of allowing issues by which many parties are affected to be settled by one or two of those parties alone." "What it means is that *all* (my emphasis) the familiar methods of adjusting wages are quite inappropriate to the demands of economic planning." "Any suggestion that wage rates should generally be fixed by public bodies immediately raises once more the question of sanctions. And here I think we have to face the fact that any conceivable sanction is *bound to do violence to deeply cherished liberties*." (My emphasis.) "The long and the short of it is, then, that planned production implies either compulsory industrial direction or a planned wage structure." "I do not think we should underestimate the seriousness of this dilemma. The Russians have resolved it, apparently, by withholding the right of free collective bargaining as we understand this."

What more could Hayek ask than this? Well, he could say: "You have gone so far in your acceptance of planning that you do not even mention the loss of the bargaining rights of *individuals*, though you did emphasize the importance of their freedoms as consumers. Even today this is unrealistic in Great Britain and the United States. You thereby greatly obscure the importance of the admission you make."

Wootton discusses freedom of enterprise in Chapter VIII. Its brevity and inadequacy seem due to underestimating its importance. This in turn is based on the view that freedom of enterprise "is of practical interest only to a small minority (sic). For every hundred people who work in an employed capacity (presumably in Great Britain), there were, in the census of 1931, fewer than eight in business on their own account." Also "freedom of enterprise had suffered many encroachments even before the War" which seems quite irrelevant to the subject, and is really begging the question. Wootton finds the socialist-capitalist controversy "barren." "The whole question of the relation between freedom of enterprise and planning needs to be treated as a matter more of expediency than of principle." "Realistic discussion must concern itself, not with two extreme alternatives, but with the endless possible quantitative variations of mixture."

In the long Chapter IX Wootton deals with her final category, the political freedoms, "the right freely to express criticism of the Government and its works; the right to form opposition political parties; the right to replace one Government and legislature by another, without resort to force." What Wootton says is that as democratic governments are *presently* organized, and with political attitudes what they *now* are, *planning is incompatible with political freedom;* and that it could be made compatible by changes in organization and political attitudes. In effect, a Pollyanna approach permits us to substitute pleasant possibilities for uncertainties and probabilities. These propositions are an exceedingly weak basis for refuting Hayek as Wootton explicitly attempts to do in this chapter.

The incompatibility of planning and political freedoms derives from the fact that planning requires continuity of administration whereas democratic political life as we know it requires frequent changes. A few quotations will establish that this is Wootton's appraisal of the situation. "The dilemma that we have to resolve here is that economic planning demands continuity, and political freedom appears to imply instability. Nothing can alter the fact that we cannot both make effective long-term plans, and continually exercise the right to change our minds about anything at any time." "It follows from all this that planning and political freedom are *only* (my emphasis) compatible in so far as people are *really* of one mind about what they want to plan for; otherwise continuity could only be maintained by tying the hands of an opposition which disapproved not only of the methods, but also of the objects, of the plan." "As we have seen, planning is only possible without sacrifice of political freedom, if the limits of any plan which is to be exempt from continual disturbance fall within the boundaries of genuine agreement on the purposes which the plan is to achieve."

One possible method of solving the dilemma which has already had some success is the scheme of "independent" boards and government corporations. As a means of securing continuity of planning and political freedom these are open to two objections as stated by Wootton. The first is that by taking such boards and corporations out of politics "we are in fact diminishing political freedom." Although Wootton thinks she is going to answer this objection ade-

quately later, I cannot find that she does so. This negative objection leads to the second which is on the positive side. "An independent organization inevitably develops a kind of life of its own, and, equally inevitably, it becomes a focus of vested interests: people connected with it want to keep it going for no better reason than the fact that it is there." In other words, "planning" as carried on through boards and government corporations involves government by bureaucracy, not effectively to be regulated either by competition or by detached government control. Substantially all that Wootton can say about this is: "If these objections are felt to be serious, again it cannot pass the wit of man or woman to invent alternative methods of arranging the mechanics of stability under a democratic constitution." "Cannot pass the wit of man or woman" is about the feeblest argument of the book.

But it leads to what is called the "real" question: "Is there a will? The most powerful of all criticism of long-term planning comes from those who suggest that the reason for continual changes of mind is the lack of common agreement to give shape and direction to our plans." This is the problem of political attitudes and processes. Hayek, according to Wootton, has stated "that in modern political units, no such agreement is possible," and that the area of genuine agreement is so limited that "the planner is driven to resort to improper devices for concealing disagreement, or for creating the appearance of agreement which has no real existence." "Planning" according to Hayek, says Wootton, "thus leads to the eventual abolition of all political, as well as of a good slice of cultural and civil freedom." This "depressing and pessimistic doctrine . . . . presumes an utterly skeptical attitude as to the common good." The attempt is then made to combat the "doctrine" with much sophistry ending in the following pearl of definition: "The common good is, in fact, anything which is commonly thought to be good."

This really calls for exegesis. It gets it. "At any time the *common* good consists *only* (my emphasis) of those social objectives about which there is in fact *genuine* and *general* agreement (my emphasis); including, it must be repeated, agreement from those who personally cannot gain and may lose in an individual, materialistic sense from the realization of those objectives." Wootton tries to show that the area of agreement is constantly increasing despite which she also says: "More and more, ours is a world of many little coteries, combining and recombining in complex patterns of harmony and discord; and less and less is it a world of large groups in clear and permanent conflict with each other." Despite the increase (if it is) of the areas of agreement modern democratic political tactics involve emphasis on the disagreements. Therefore, "some modification of this attitude will, I think, be necessary if democratic governments are to undertake extensive economic planning. As we have seen, planning is only possible without sacrifice of political freedom, if the limits of any plan which is to be exempt from continual disturbance fall within the boundaries of genuine agreement on the purposes which the plan is to achieve."

But how is it possible to plan if essential parts lie outside "the area of agreement"? Wootton does not answer that question, which is critical for the whole

argument. Rather, she says that instead of "manufacturing" agreement (it is Hayek's word to which she makes stiong objection) "it is a case of *discovering* agreement piior to action. This is the technique in which democracy is so little practiced." From all of this I would say the outlook is not very promising. Wootton virtually abandons planning: "If, however, any serious attempt at continuous planning within, *but not beyond* (my emphasis), the limits of the area of common agreement is to be made, some method must be found of determining where that area ends." And again: "What I have suggested is, on the contrary, that agreement should be *discovered;* and that, where and in so far as it obtains, so far *and no further* (my emphasis) should economic and political programs *be placed out of reach* (my emphasis) of the unstable jousts of Parliamentary democracy." But is it possible to have general planning which omits those parts which are outside the area of agreement; and how does one determine what is the area of agreement in a democracy except through the Parliament? Wootton's answer is slippery and unrealistic. She has already said, as I noted early in this review, that the problem of the common good in any quantitative and scientific sense is insoluble.

This whole chapter is, to my mind, the sophistry of a wishful thinker. The strongest evidence of this, aside from critical analysis, is that twice Wootton resorts to the argument "It cannot pass the wit of man or woman" to "devise" or to "invent" solutions which in fact have not been devised or invented. "It is much *to be hoped* (my emphasis) that the attempt to explore the range of interparty agreement will lead to calmer and clearer thinking about the distinction between social ends and means; and to a much more experimental attitude toward choice of means." This relates to another proposition: "The simple basic principle remains—the more people are agreed, the less there is left to quarrel about: and *vice versa.*" Is this true, or is it not rather that the wider the area of agreement and of common undertaking, the longer the periphery in which there is cultural diversification and disagreement?

We now come to the end. Wootton has undertaken to refute Hayek's position that planning and totalitarianism are *necessary* correlates. At least in so far as Hayek's demonstration is restricted to *The Road to Serfdom* I think Wootton partly succeeds in this purpose. She shows that there is reasonable ground for asserting the *possibility* of a considerable degree of freedom under planning, although in doing so she rather convinces me, so far as the record goes, that Hayek is probably, though not necessarily, right.

However this may be, Wootton herself emphasizes that demonstrating a reasonable possibility of freedom under planning does not assure such freedom. Whether planning with freedom can be had depends upon (1) the choice of planners; (2) a shift of political activity from center to circumference; and (3) the quality and attitude of the people. Comment on the third factor is reserved for the concluding paragraphs. On the second it may be noted that in his *Democracy in America,* first volume, de Tocqueville emphasized the importance in the success of American democracy of wide distribution and localization of political power. Wootton is urging something only apparently similar under plan-

ning, for she has already amply demonstrated that political power, whatever the practical modes of delegation of authority, must be centralized if there is to be central planning. The critical issue is where the final decision must be located. Saying that politically apathetic people should participate in local boards having executive or judical responsibilities does not dispose of that issue.

But this is all of secondary importance compared with the question of leaders of planning and how they will behave. Indeed, Wootton entitles this final Chapter "Who is to Plan the Planners?" "Here," she says, "all the old clichés are just as true as they ever were—power corrupts, absolute power still corrupts absolutely, and eternal vigilance is just as much the price of liberty as ever it was."

Professor Hayek stated that economic planning inevitably brings the worst to the top. He gave three specific reasons for this which Wootton spends some time in challenging. I think she really avoids his reasons to some extent; but she completely evades the more fundamental argument of Hayek's Chapter "Why the Worst Get on Top" which might better have been entitled "Why Those on Top Are or Become the Worst." This is that when an organization is set up to plan an economy, i.e., an authoritarian state, the ends of the state become paramount; and where a dominant party is necessary to maintain the dominance of the state, the ends of party organization are dominant over all morals of individuals. There is nothing new in this to anyone who studies either history or the sociology of organization. In every organization the distinction between "personal capacity" and "official capacity," between personal morals and impersonal or official behavior is well recognized. But in the ordinary subsidiary organizations of non-totalitarian societies the difference is not great as a rule because by law and custom individualistic morals are regarded generally as applicable also to organizations, and are to a great extent enforced against them by the state, by others acting through the courts, and by the need for maintaining good will. But when the state as Planner is above all and determines all and all depend directly upon it, there is no one to enforce any system of morals against it, and the maintenance of its authority becomes the only fundamental rule of morals. Its failure spells social chaos and the extinction of its leaders. The most moral and amiable of leaders under these conditions must be governed by the needs of organization, just as the most amiable and tenderhearted of generals must not only slaughter the enemy but lead their own men to slaughter to do so. The organization, i.e., the army, will otherwise be lost, and fail of its mission. Compared with this problem that of selection and control of leaders is minor. What Wootton has to say about it seems sentimental and immature, not to say amateur, speculation. This is enough to say of it.

The fundamental weaknesses of Wootton's book lie in its exaggerated intellectualist approach rather common among pink advocates of planning. Despite its "practical" flavor it scarcely ever suggests the problem of errors in planning, nor the fact that the planners will necessarily operate unconsciously as the agents of a "spontaneous automatism"—intellectual, emotional and political—that is more subtle and even more hidden than the "unseen hand" of unplanned eco-

nomic systems. Hayek's error seems to me to be failure to make more explicit that his argument was not mere rationalization or merely a limited amount of deduction from scanty history. Nevertheless, it does not follow that because we can see no way out none can evolve even if it cannot be planned. Without being able to defend myself against his argument, as Wootton has not, I nevertheless cannot accept as the only alternatives serfdom or perpetual revolution, i.e., a wide-open and intolerable competition. Barbara Wootton has performed a valiant service in assaulting a stronghold, even though it is not, I think, an impregnable one.

If this review exhibits indefiniteness and vacillation in some respects, I should like to attribute such qualities to the eternal dilemma which the problem of freedom presents. Without touching on the philosophical question of free will and determinism, there are two fundamental questions only glanced at by either Wootton or Hayek: (1) Do people want freedom, or how much do they want it, or how much freedom can people take? (2) What is the most general condition of freedom, and how can that condition be established?

Hayek and Wootton both assume that people want freedom or ought to have it, though the question with Wootton is more one of degree than with Hayek. This question is much broader than the problem of freedom versus security or that of freedom versus equality, matters that deserved more attention than the purposes of either Hayek or Wootton permitted. The fundamental question is the desire for freedom versus reluctance toward responsibility. When tyranny reaches the point of physical restraint, injury and murder, there is little question that freedom is desired. The instinct of self-preservation provides for that. Short of that point, however, the imposition of freedom may easily be a severe form of coercion, involving boredom, frustration or persistent worry. Those who appear most free, in positions of high command, seek constantly to devise rules, norms, formulas, and organization by which decisions are made for them, and they are relieved of liberty of action, though not relieved of responsibility or deprived of the illusion of control. The burden of conscious deliberation of choice quickly becomes great and unbearable, the ease of responsive obedience the strongest enemy of systems of freedom. If the people's capacity for freedom is narrowly limited, then it may be conceived to be rationed among the cultural, civic, economic or political freedoms, or to be concentrated in one category or another; but it is difficult to conceive that people can accept complete freedom in all categories simultaneously. In this I think lies the explanation of the sincere adherence of Germans, Russians, the British and Americans, to mention no others, to different and contradictory philosophies of freedom. The insistence of the Russians that their system is democratic, which seems to many Americans so stupid and insincere, is more than communist propaganda. A new description of democracy might well be that in a democracy people have to be only as free as they want to be.

The most general condition of freedom is that of order. If there were no order in nature it is inconceivable that there could be adaptation to it. In the social world order may be based upon conditions of nature (such as geography and

climate), institutions, political systems, systems of technology, inheritance and race. Actually it is unstably based upon one or another of an almost infinite number of possible combinations of all these and other elements. But the primary necessity is order, and the question of which kind of order is preferable is secondary, and may even be a meaningless question in the sense that it is generally insoluble. But to be order it must be in fact accepted behavioristically, whether it is philosophically accepted or not. Hayek advocates a political and civic order based on the rule of law; but the rule of law can produce no order unless the people abide by it. Wootton is for order based on control of economic behavior. It will produce no order if the people prefer otherwise, as evidenced by black markets and evasions, no matter how they vote. At one time in Western Europe order was partly based on compulsion as respects religion. With the Reformation and religious freedom came political order based on nationalism and the separation of Church and State. We cannot have freedom without order. We apparently cannot have order and all our freedoms too.

Newark, N. J. CHESTER I. BARNARD

Financial Control System of the Tennessee Valley Authority. By the Society for the Advancement of Management, Washington Chapter. Washington: American University Press, 1945. Pp. 43 (mimeographed).

This "Case Study of the Budget Planning Round Table" is published as a revision of the Federal Fiscal Series, Number I, under the same title. The report was issued in original form early in 1944 and has been out of print for some months. The new edition is rewritten and enlarged to give a general sketch of the T.V.A. accounting system from the viewpoint of its contribution to budgetary, including general management, control. It does not deal with budgetary organization and operation as such, however; that subject matter is reserved for another report.

Although the report contributes to the technical aspects of government recording and reporting, it is of primary significance for the student of the larger aspects of public finance management. Three additional case studies of particular Federal agencies are promised for future release.

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Guideposts to a Free Economy. By Harley L. Lutz. New York: McGraw-Hill Co., 1945. Pp. ix, 206. $2.00.

Whether or not it is the proper role of government to attempt to influence the economy in order to bring about full employment has ceased to be a matter of argument with most economists. Current controversies are directed at the best methods by which the government can accomplish the goal. Some, however, such as the author of this book, remain unconvinced even by the events of the depression and war years that the government has any proper function other than that of the "traffic officer."

The twenty short chapters constituting the book are reprints of articles pub-

lished in the *Tax Review*. They are devoted to the thesis that whenever the government steps out of what is conceived as its proper role, the consequences are bound to be disastrous. The tendency toward more and more government interference, the author feels, is bound sooner or later to destroy "free enterprise" and constitutes a "short cut to serfdom".

Not only the philosophy but the terminology of those who argue to the contrary is attacked. There is, for example, the matter of the current emphasis upon "national income". In the first place, it is used by the "national income cult" as an unbreakable alibi for not doing such unpleasant things as balancing the budget. This same group, Professor Lutz continues, either do not understand that production must come before income or prefer to ignore that fact as an excuse for government spending. They fail to realize that such spending merely results in inflation or tends to delay the adjustments in cost that are essential to recovery.

The private enterprise system, the author believes, can be preserved by a restoration of true liberalism in contrast to the perverted present day concept of liberalism as "a release from inexorable economic law, an escape from the hazards and consequences of economic liberty back into the suffocating control of bureaucracy." One of the keys to the restoration of private enterprise is the restoration of "sound" taxation. This means a reform of existing business taxes, changes in the excess profits credit provisions of the income-tax laws, and other reforms. The chief criticisms are directed, however, at the heavy income tax structure.

The theory underlying progressive rates of taxation on individual incomes is entirely wrong. Professor Lutz believes that the principle of "ability to pay is fully satisfied by a proportional tax rate." Since all scales of progression are merely guesswork, the only fair rates are proportional ones. In addition, progressive taxation destroys the private enterprise system by removing incentives. "Mass unemployment as a chronic phenomenon has occurred with the increasing weight of progressive taxation."

Professor Lutz is unalterably opposed to the use of taxation, spending, and borrowing as instruments of policy. This new fiscal theory means changing to the Germanic concept of the state as master. In addition, there is no necessity for compensatory spending. "If full employment means work for all at such a wage as may be determined by equating the supply of labor and the demand for it, we need not be seriously concerned about unemployment even if there should be a depression." At any rate, it is impossible to maintain full employment by government intervention.

The foregoing are but a few of the many features in the current scene that are found to be disturbing. Equally so is the social security system and plans to expand it. Severe attacks are reserved, however, for the sponsors of the full employment bill and for Sir William Beveridge. The bill and the scheme are branded as fantastic. National income, a mere abstraction, would be given statutory validity. The bill confuses cause with effect; the volume of the gross national product is the result, not the cause of jobs. Finally, it is impossible to

make accurate forecasts unless we follow the Russians in controlling all types of production and employment. At any rate, the unemployment compensation reserve, described in another connection as of no value, will act as a cushion for any minor shocks that may occur in the transition from war to peace.

What are proposed as substitutes for the theories and practices attacked? Professor Lutz has a simple recipe for prosperity: "If you want to make a dollar by any honest means you are free to try, and if you succeed you may keep it." To accomplish this, industry must be freed from onerous taxation. Rigidities in wages must be eliminated for unemployment is largely caused by wage and cost rigidities. Progressive individual income taxes should be drastically reduced if not eliminated, and a universal sales tax of from 10 to 15 per cent be substituted. The government should get out of all types of business. Above all, we should abandon forever the idea that the government can provide jobs without engaging in a vast inflation.

The book is written in a highly emotional tone. Such labels as "fiscal medicine men," "Marxian doctrine," "Pollyanna tax theorists," "collectivists," and "yarb doctors from abroad" occur frequently. At times, it appears that Professor Lutz either does not understand those he attacks or is not fair in considering their theories. Inconsistencies crop up. Nevertheless, the general thesis of the book may be accepted as a guide if the general premises which appear to be assumed are likewise accepted. Some of them are: depressions are caused by too high wages and costs; savings of individuals are the principal source of investment; money and credit are neutral elements in influencing economic activity; all business is inefficient; all government is inefficient; and if the economic system is left alone it will automatically adjust itself. It is difficult, however, for many who are neither "fiscal medicine men" nor "yarb doctors" to accept such assumptions.

There are flaws in the economic policies and governmental programs that Professor Lutz attacks. Advocates of national planning, for example, have not satisfactorily explained how full employment may be obtained without rather wide and complete government controls. Advocates of compensatory spending have been unable to determine what will happen if the national income does not continue to increase. There are many other problems that must be solved. The tragedy is that Professor Lutz and other "sound" economists have no better alternatives to offer.

On military leave from CHARLES T. TAYLOR
Federal Reserve Bank of Atlanta

The Incidence of Excess Profits Taxation. By Marion Hamilton Gillim. New York: Columbia University Press, 1945. Pp. 179. $2.75.

This is Number 514 of the "Studies in History, Economics and Public Law" edited by the Faculty of Political Science of Columbia University. Its purpose as stated by its author, Dr. Marion Gillim, is to examine by deductive means possible conditions under which an excess profits tax may be shifted.

The first two of the study's five chapters review the extant literature on the

incidence of general and partial income taxes. This survey brings to the fore certain moot questions relating to the scope and meaning of the concept of incidence. Are the reactions of the producers immediately affected by the impact of a tax the only phenomena to be taken into account in a study of incidence? In other words, does incidence concern itself merely with the influence of taxes on supply and the results of supply changes on the prices charged or paid by the immediately affected producers?

Does incidence comprehend more than this? Does it cover the effects of taxes on the general pattern of demand? If so, should consideration be limited to the effects on demand produced by the collection of the tax or should cognizance also be taken of the demand changes produced by the government's expenditure of the tax? Finally, is the concept of incidence broad enough to cover all changes in the volume, composition and distribution of the national income incident to the collection and spending of a tax?

Dr. Gillim's answers to the above questions are implicit in the methodology which she uses to analyze the incidence of the excess profits tax. She relies in the main on the method of partial equilibria. This means that she approaches the problem from the standpoint of the assumed reactions of individual producers to the excess profits tax. From producer reactions she proceeds to supply and from supply to the prices of specific goods.

The author makes one concession to the broader view of incidence in giving superficial consideration to the effects of the collection of an excess profits tax on the general pattern of demand. But changes in the general pattern of demand are not capable of being handled by partial equilibria methods and her effort in this direction is consequently not integrated with her supply analysis. She specifically rules out, as irrelevant, consideration of the effects on demand of governmental expenditure of the proceeds of an excess profits tax.

Following the standard categories of contemporary deductive price theory, Dr. Gillim in her last three chapters considers the incidence of the excess profits tax in relation to the market period, the short-run and the long-run period, and under conditions of competition, monopoly and monopolistic competition. She concludes that the excess-profits tax may be shifted or may lead to price changes, if any or all of ten stated conditions are lacking. Strategic among these stated conditions is that the tax must not reduce profits below a theoretical competitive norm which presumably varies from industry to industry as well as from time to time, and which Miss Gillim does not tell us how to measure quantitatively.

It would be wrong to conclude that the author has done no more than to define one unknown "tax incidence" in terms of another even more elusive unknown, "normal rate of profit." In the reviewer's opinion, Miss Gillim has made a substantial contribution to the study of tax incidence. Within the limits of the method of partial equilibria she has done a competent job. The very excellence of her work serves to emphasize the sterility of the partial equilibria method as applied to a practical question of tax policy.

What the fiscal policy maker wishes to know in relation to the excess profits tax is what effects its collection and spending will have on the volume, composi-

tion and distribution of the national income as compared to the effects of alternative fiscal programs. It helps him very little to be told that under certain hypothetical conditions the excess profits tax may change the output and price of sundry individual products.

University of North Carolina CLARENCE HEER

National Power and the Structure of Foreign Trade. By Albert Hirschman. Berkeley: University of California Press, 1945. Pp. 14, 170. $3.00.

Those parts of Dr. Hirschman's little book which examine the theory and statistics of international trade are neatly reasoned and probably justify the publishers' claim that they here present "a contribution to the methods of statistical analysis" and a "new departure in the theory of international trade". What Dr. Hirschman does, is to apply the theory of bargaining power to foreign trade (adding a few twists new to the reviewer) and then to devise statistical tools for testing the realism of his theory. His indices of "preference for small or large trading countries" and of "concentration of trade" appear to be especially ingenious devices. His study of the commodity structure of world trade is more conventional, but serves to provide statistical support for the familiar argument that already established industrial nations will gain by the spread of industrialism rather than suffer from it.

When the book attacks the central problem of national power, however, it is frequently disappointing. Its leading merit here is merely recognition that "economic relationships existing in a society dedicated to the pursuit of welfare inevitably give rise to various forms of economic power"—a conclusion which is not startlingly new and which could be drawn concerning domestic as well as international economic relationships. (In fact, as has been stated above, much of the analysis consists of applying the theory of bargaining power to the problems of foreign trade.) When Dr. Hirschman points out certain weaknesses in the distinction usually made between "the economics of welfare" and "the economics of power" and remarks that the concepts of welfare and power apply only to the aims of policy, and thus, by implication, not to analytical tools, he overlooks the fact that a change in aims may require a change in the tools of economic analysis. "Cost" and "value", for instance, would have to be radically reinterpreted in a thoroughgoing economics of power, since the former could mean only "loss of power", and the latter "power" itself. Likewise, Dr. Hirschman does not point out that certain types of coercion which he discusses derive their significance almost entirely from welfare considerations and would not be effective in an international community devoted solely to the pursuit of power.

The conclusion of the theoretical argument (pp. 79–81) is the most disappointing feature of all. Here Dr. Hirschman calls for the abolition of national economic sovereignty as a means of promoting world peace, arguing that only this drastic move will prevent the use of foreign trade to increase national power. But surely the abolition of national economic sovereignty implies the prior or simultaneous achievement of world peace through the creation of a world state, and Dr. Hirschman does not indicate how this desirable goal can be attained.

Neither does he offer (as the publishers promise) "suggestions of how ... (undesirable) practices may be detected and outlawed" or "a substantial contribution to the shaping of postwar policy".

Washington, D. C. HENRY OLIVER

Principio to Wheeling, 1715–1945. A Pageant of Iron and Steel. By Earl Chapin May. New York and London: Harper & Brothers, 1945. Pp. 335. $3.00.

This is an interesting, readable, and dramatic account of the development of the American iron industry into the steel industry which has been so basic to America's economic progress. Using many hitherto untapped sources, as well as the obvious and well known ones, the author traces the evolution of one of the earliest iron furnaces in this country, that at Principio, Maryland, into huge blast and open hearth furnaces and steel mills at Wheeling, West Virginia. Very few Americans know that George Washington's father, Augustine, and his brother, Lawrence, were iron-ore miners, blast-furnace operators, and pioneers in the American iron industry. Mr. May tells this unusual story in the first ten chapters of his book.

The volume covers the period 1715 to 1945 and dramatizes two centuries of metallurgical pioneering and industrial expansion. It is the story of British determination to procure iron ore from the colonies and of colonial efforts to promote iron production through bounties, tax exemption to workers, and other inducements. It is the story of indentured servants and other workers in the iron industry. It is the story of a "redskin-bedevilled Ohio River settlement" which became Wheeling, West Virginia, "The Nail City" in early years, and a twentieth century steel center. It is the story of the arrival of the Baltimore and Ohio Railroad at Wheeling, to be followed by other roads at a later date. It is a story of "Wheeling Steel" and its manifold uses in war and peace, a story of nails, welded steel pipe, "red bellied boats," bombs, and barbed wire. It is also the story of the social life of Wheeling. Above everything else, it is a biography of a frontier city and the tale of one of the nation's great steel companies whose energies have recently been directed to turning out enormous quantities of essential munitions of war.

The narrative is enlivened by extracts from the writings of Joshua Gee, William Byrd, Alexander Spotswood, and many other significant figures in early American history. There are many human-interest stories presented against a vivid background of America's unfolding economic power. Students of economic history will be particularly interested in statistics relative to iron-ore production, exports, prices, wages, and similar matters.

Several minor errors of fact have been noted. John Smith's voyages were in 1607, *not* 1606 (p. 2). The French and Indian War began in 1754, *not* 1755 (p. 52). Patrick Henry was *not* fighting for representation in Parliament (p. 51). It would be hard to prove that "little England prepared to build a globe-encircling empire," (p. 1) although she did exactly that.

The book contains many interesting documents and some unusually fine pictures. It also has a well selected bibliography and a satisfactory index.

Mr. May has presented one of the most interesting volumes on the iron and steel industry which has appeared.

University of North Carolina HUGH T. LEFLER

Southern State and Local Finance Trends and the War. By James W. Martin. Nashville: Vanderbilt University Press and Lexington: University of Kentucky Press, 1945. Pp. 106. $.50.

Professor Martin has made a valuable contribution to the growing information and understanding of governmental expenditures and revenues in the Southern states by this brief study. The monograph covers revenues, expenditures, intergovernmental fiscal relations, state and local debt, and general administration during the past two decades. The basic factual material is presented at the end of the bulletin in statistical tables attractively arranged. Some interesting and significant trends not generally recognized are revealed. For example, the data shows that revenue from the motor fuel tax in the South in 1944 was substantially the same as it was in 1938. This fact is rather surprising in view of the rationing of gasoline. At the same time collections from the income tax increased more than 250 per cent. This increase of course reflects the rather phenomenal increase in income in the South during the war period.

In tax administration Professor Martin sees no significant changes and reaches the conclusion that tax administration in the South has not yet been developed to the high degree of efficiency that is desirable. Of course during the war period tax administration had been seriously hampered by the reduction in experienced personnel due to the claims of the armed services and other opportunities provided by war industry.

The fact that the total cost-payments of states increased more than 115 per cent during the nine year period 1932–41 while cost-payments of local governments advanced only 7.3 per cent is not surprising. The general trend in the whole country as well as in the South has been in the direction of the states assuming financial responsibility for governmental services which formerly were taken care of by the counties and local districts. State support of education and state construction and maintenance of highways are illustrations of this condition. Expenditures for public schools declined sharply immediately after 1930 and then increased gradually to a point approximating the 1930 level. Of particular interest is the fact that expenditures for each school child in daily average attendance was 3 per cent lower in 1940 than in 1930.

The section dealing with trends and intergovernmental fiscal relations calls attention to a condition that is of the greatest importance in the control of expenditures in the years ahead. Federal grants to the states for public assistance, highways, education, agricultural and miscellaneous purposes have increased rapidly during the last fifteen years. Similarly grants by states to counties and other local governmental units for various purposes have increased sharply. While this trend is undoubtedly justified by the principle of supplying govern-

mental services to all the people regardless of location and tax-paying ability it has the danger of leading to extravagance and competition among the states for Federal support and among the local governments for state support. In connection with this trend is another that one wishes Professor Martin had given some definite attention in his study. It is the allocating of certain parts of state revenue to the counties for general purposes. This distribution is not in the form of grants-in-aid for a specific activity, but is a distribution of revenue by the state without any direction as to how it should be spent. It is doubtful whether there can be a proper control of expenditures when the spending unit is not responsible for the collection of the revenue and does not have to account to the state for the way in which the revenue has been spent.

Professor Martin's study shows a condition in the South which is related to the one indicated above. It is the fact that since the 1920's state governments have shown a tendency to accept partial or complete responsibility for local debts. The two methods employed involve (a) loan of the state's credit and (b) acceptance of liability for servicing or partially servicing local debts. A majority of the obligations thus assumed by the states has been for highway purposes.

In relation to income and other factors determining ability to pay, the public-debt load is appreciably higher in the South than in other states. This condition is due to relatively low per capita income and other measures of debt-paying capacity. In the field of general administration dealing with budgeting, accounting, purchasing, and public debt management, the facts lead Professor Martin to the conclusion that not much progress has been made in the South.

Not the least valuable part of the study is the appendix which gives a brief discussion of the reliability of the statistical data which form the basis of the report. Professor Martin recognizes that because of differences in accounting in the various states and the differences among the states in making grants-in-aid and in distributing state revenue to local governments, general conclusions are hazardous. Certainly too many discussions of comparative tax burden and governmental expenditures are based upon figures which are in fact not comparable.

University of South Carolina S. M. Derrick

Tax Bill of a Selected Manufacturing Corporation in Six Southeastern States. By Clarence Heer. Raleigh: North Carolina State Planning Board, 1945. Pp. iv, 58.

Many investigators have sought to compare manufacturing taxes in one state with those in another. Most of the studies have been meaningless. Indeed, those reports which merely examined state, but not local, revenue loads have often positively if unintentionally misrepresented the truth. Critical readers familiar with the literature will doubtless agree that Professor Heer has been more successful than his predecessors in avoiding the pitfalls which lurk around anyone seeking a meaningful interstate comparison.

Heer's plan has involved the selection of one actual manufacturing corporation and undertaking to compute its tax liability in each of 89 alternative loca-

tions in six states. All locations were in cities of 15,000 to 101,000 population. The legal data respecting obligations to states and local governments, including local assessors' estimates of assessment ratios, were taken from the Commerce Clearing House Corporation Tax Service. Professor Heer selects this basis of estimating undervaluation in the belief that it is superior for this purpose to a measure of undervaluation computed from actual assessments and sales. He does not support his view with argument nor does he discuss the well known fact that Southern local real estate assessments are ordinarily higher as related to market price in the instance of old than of new properties.

The study reveals that no state has consistently lower taxes on manufacturing than any of the other states studied. In fact, the amount of tax liability depends mainly on the balance sheet and on the level of earnings. For instance, if earnings were low, states with relatively high property taxes (e.g., Georgia and Tennessee) would be high tax states; but, if the corporation earnings were high, then the comparatively high income tax states (North and South Carolina) would be the high tax states. If the Federal corporation taxes were low and the rate of earnings merely nominal then Alabama and Georgia would be the high tax states.

Heer concludes with a strong plea for a uniform tax policy for the Southern state and local governments, as to both base and rate. By adopting this policy the states would not only "eliminate taxation as a factor in plant location" but would also make the determination of the tax load "a matter of objective research and investigation in which the controlling consideration would be the comparative weight of taxation borne by industries in competing areas outside of the Southeast." The reviewer believes Heer's analysis demonstrates the impossibility of eliminating manufacturing tax differentials. He is skeptical, too, respecting the nice competitive adjustments envisaged on pages 17–22. The questioning attitude is bolstered especially by the known fact—verified by Heer's data—that taxation in most cases is a comparatively insignificant plant-location factor in the economic sense, at least under existing interstate tax differentials. These dissents from Heer's economic theory, if well founded, do not mean that the suggestions for unification of policy are ill-advised. They do mean, in the reviewer's opinion, that the economic argument for unification of tax bases and rates could easily be overstated.

Bureau of Business Research JAMES W. MARTIN
University of Kentucky

A Tax Program for a Solvent America. By the Committee on Postwar Tax Policy. New York: The Ronald Press Company. Pp. x, 278. $3.00.

The recommendations of The Committee on Postwar Tax Policy as set forth in the Committee's recently published report *A Tax Program for a Solvent America* have received widespread publicity in the daily press. From the preface to the report we learn that the Committee on Postwar Tax Policy came into being as a direct result of a conference of a "score or more leading economists" which took place in the spring of 1944 under the chairmanship of the President of

Brown University. The committee consists of a professor of economics, a banker, an accountant, and two lawyers. Harley L. Lutz, professor of public finance, Princeton University, served as Director of Research and performed most of the work of draftmanship. Funds for carrying out the studies on which the report is based were granted by the Maurice and Laura Falk Foundation, but it is stated that the Foundation is not to be understood, by virtue of its grant, as approving any statement or view expressed in the report.

The report of the committee is broader in scope than its title indicates. It contains not merely one tax program but a selection of programs for balancing the Federal budget under various assumed conditions as to the level of expenditures and national income. These programs are carefully worked out and are supported by extensive statistical research. They should prove an invaluable aid to those responsible for framing fiscal legislation during the years immediately ahead.

Although offering a range of choice, the committee does not hesitate to indicate what its own preferences are. It shows how Federal expenditures of 15, 18 and 22 billion dollars, respectively, might be financed, but it leans toward the lowest of these three figures. It advocates an annually balanced budget with some provision for debt retirement as the normal policy. It expresses its belief that the taxation of inheritances and estates as well as gifts should be abandoned by the Federal government and returned to the states.

As part of its favored postwar program, the committee recommends the immediate repeal of the war excess-profits tax and reduction of the rate of the corporation income tax to a level of equality with the proposed initial rate of the personal income tax. It recommends, also, that the maximum personal income-tax rate on the highest income bracket be reduced from the present 94 per cent to 67–72 per cent, and that corporation dividends carry a personal income-tax credit at the initial or basic rate in consideration of the corporation income tax paid on distributed income. The above recommendations, if adopted, would leave income recipients in the upper brackets, especially dividend recipients, with a somewhat lighter tax burden than they bore before the war.

On the other hand, the committee suggests retaining personal income-tax exemptions at their present wartime level of $500 per person. It also proposes taxing all incomes in excess of these exemptions at an initial or basic rate of from 15 to 20 per cent. As a possible expedient for balancing the budget, should postwar expenditures exceed certain limits, the committee suggests a 5 per cent Federal retail-sales tax.

The announced objective of The Committee on Postwar Tax Policy is the maintenance and continued growth of the economic system of free private enterprise. Most Americans will heartily endorse this objective. Some of them, however, will not be disposed to endorse the committee's specific tax proposals until a more convincing connection has been established between the specific proposals and the chosen goal.

The committee endeavors to supply the needed connection by stressing two propositions: (1) that the maintenance and continued growth of the economic

system of free private enterprise requires an adequate flow of new venture capital and (2) that the requisite amount of new venture capital will not be forthcoming unless successful risk takers are allowed adequate rewards. From these propositions it is presumably supposed to follow that an increase in the reward for successful investment, accomplished through tax readjustment, will increase the flow of new capital investment, provide more jobs, and strengthen and expand the private enterprise system.

The two propositions from which the conclusion emerges are probably true, but they do not encompass the entire truth. An expanding private enterprise economy undoubtedly requires new capital investment, but new capital alone will not produce expansion. In addition to capital, an expanding economy requires intelligent, energetic and co-operative workers, trained technicians and inventors, and consumers with the desire and the purchasing power to raise their standard of living. It may even require poets to whet our appetites or to give us goals which will inspire our utmost efforts.

To obtain all of the necessary ingredients for economic expansion, it is doubtless necessary to allow an adequate reward to everyone whose co-operation is essential. It is pertinent, therefore, to ask whether the program of The Committee on Postwar Tax Policy leaves an adequate reward, after taxes, to those members of our private enterprise system who do not qualify under the committee's arbitrary definition of risk takers. The report of the committee has nothing to say on this particular question.

University of North Carolina CLARENCE HEER

Theory of Economic Aggregates, A Manual of General Business Forecasting. By Montgomery D. Anderson. Privately printed and distributed by the University of Florida Book Store. Pp. 140. $2.50.

This book presents some involved mathematical formulations of such economic quantities as total yearly wages, employment, profits, investments and savings in the United States since 1918. The author attempts to demonstrate statistically the existence of three constants in our industrial life: a coefficient of industrial complexity, a normal rate of capital turnover, and a normal rate of money turnover. He then shows that there are long-run interrelationships existing between these three constants.

All of this theory appears to have been a nice back-drop for the introduction of the author's methods of predicting the total value of industrial shares on the basis of two time series, one for short-run and one for intermediate forces. The author slyly refuses to disclose what two series were used in making his remarkable predictions. The reviewer feels that the excellence of these results depended to a great extent upon the fact that the 1929 collapse was revealed in time by the intermediate series. The short-run series had to be used to determine all other selling times, because the intermediate series seldom reflected a downward trend soon enough. Unfortunately, Anderson's methods could not be tested for other major crises than 1929.

This review will concern itself primarily with the mathematical and statistical

phases of the manual and is not intended to evaluate any of the economic interpretations. The author strives valiantly but unsuccessfully to prove that his economic theories are not based upon a labor theory of value. He reverts to 18th century Physiocracy in stating that profits as a rule originate in extractive industries. He offers a rather simple explanation of the existence of a 48-month business cycle for the period before 1929. Anderson asserts that the total rate of sales must increase in order to insure the survival of private capitalism; an increasing supply of money is also said to be necessary. No inflation would result if the supply of goods increased as rapidly as that of money. Finally he shows that investment can be stimulated better by higher incomes than by increased savings.

As to the mathematical parts of the manual, the notation is unnecessarily complicated and inconsistent. For example, m is used as an index of industrial complexity while $\bar{m}$ is an investment multiplier (ratio of national income to investment). Also β_t is both the average utility of goods and the amount of money invested in industrial stock. A table of notation would have made the book much more comprehensible.

The author is all too prone to set up complicated formulas and then to simplify them by making many assumptions. For example, if we let N = the number of laborers fully employed, P = the price of labor per unit of product, X = the average product per laborer, m = the complexity of the industrial process, M = the amount of money, V = the velocity of money, $N' = \frac{dN}{dt}$, etc., then

$$\frac{N'}{N} = \frac{M'}{M} + \frac{V'}{V} - \left(\frac{m'}{m+1} + \frac{P'}{P} + \frac{X'}{X}\right).$$

At one point, it is assumed that $\frac{V'}{V} = \frac{2\,m'}{m+1}$ and $\frac{m'}{m+1} = \frac{P'}{P}$, so that $\frac{N'}{N} = \frac{M'}{M} - \frac{X'}{X}$. Later it suits the author's purpose to assume $\frac{V'}{V} = \frac{m'}{m+1} = 0$, and $P\,X$ = constant, so that $\frac{N'}{N} = \frac{M'}{M}$. The author should have shown that the second formula is the same as the first except that the average product of labor is assumed to remain constant over time ($X' = 0$).

The author uses a variety of business indexes to check the accuracy of his formulas. He might have improved the presentation of these results by pointing out the economic implications of the assumptions being tested at every point, as I have indicated in the previous paragraph. It is the reviewer's opinion that the results are good enough to merit serious consideration, but the statistical tests used in evaluating the agreement between the various time series can not be recommended. In evaluating the accuracy of the formula $\frac{N'}{N} = \frac{M'}{M} - \frac{X'}{X}$, for example, the author computed both sides of the formula for the years 1930 through 1939, and calculated a correlation coefficient between the two series. There is no known method which can be used to test the significance of such a

correlation based upon serially correlated variates. R. A. Fisher suggests that orthogonal polynomials be fitted to each series and the residuals after the last significant reduction be correlated.[1]

The same methods should have been followed with two series used to compare the indexes of the velocity of goods and the velocity of money from 1918 through 1933. If a third degree polynomial were fitted to each series and the residuals correlated, the resultant correlation would have been 0.78 with 12 degrees of freedom instead of 0.97 with an undetermined number of degrees of freedom. The author took cognizance of the serial correlation problem by reducing the degrees of freedom to 8 for $r = 0.97$. This reviewer at one time used a similar method in a problem of harmonic analysis, but feels that it is to be avoided if something better is available.

In summary, it can be said that the success of the methods proposed is such that Anderson's study cannot be dismissed lightly. However, his failure to specify the indexes used in his study of stock prices and his questionable assumptions and statistical procedures throughout the book suggest that his success may have been partly in spite of, rather than because of, the methods used. He has introduced some thought-provoking ideas, but much refinement in the techniques seems to be called for.

North Carolina State College R. L. ANDERSON
University of North Carolina

[1] R. A. Fisher, Statistical Methods for Research Workers.

STATE REPORTS

ALABAMA

Industrial activity in Alabama for the nine-month period January through September was somewhat lower than for the same period of 1944. Construction was well above 1944 but still far below 1941 and 1942, the peak years of war construction. Consumer activity exceeded any of the previous war years as well as the prewar year 1939 used for comparison. New benefit claims for unemployment compensation increased progressively with the end of the war in the two different theaters, September showing the largest number of new claims in five years.

All of the indicators of sales activity showed an increase over 1944. Department store sales in Birmingham were the highest on record, and showed a gain of 12 per cent over 1944. This was representative of the country as a whole, as department store sales throughout the country increased 11.2 per cent over 1944. Retail sales for the state as a whole (estimated from sales-tax collections) rose 10 per cent over 1944.

A very noticeable effect of the end of the war on business activity in Alabama may be seen in the increase in new benefit claims for unemployment compensation. There was a progressive increase in claims during the first nine months of 1945 with the end of war in the two different theaters. During the third quarter which saw the close of the war with Japan, there were almost ten times as many new benefit claims as during the same quarter of 1944. Inversely, United States Employment Service placements increased in the first quarter over 1944 and decreased in the second and third quarters. The decrease in placements in the second quarter from 1944 was by only 4 per cent while in the third quarter the decrease was 33 per cent.

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An item of considerable interest to those who are interested in public finance and the social welfare and educational programs of the various states, was the attempt to amend the income tax provisions of the Alabama Constitution so as to permit the use of a part of the accumulated surplus for educational and other social purposes. This amendment came to vote early in September and was rejected by the people. As a result, the surplus in the Treasury will remain without any provision for its use until after a new legislature can convene. Under the existing law, the proceeds of the income tax must be used either to retire the bond issue which funded the old floating debt of the state or to reduce the ad valorem taxes. There is in existence a homestead exemption law, the loss of revenue from which is compensated from the income-tax revenues. It seems now that the next legislature will assemble with the presumption that it has a mandate from the people to enact some sort of measure which will further reduce property taxes.

The legislature passed a severance tax on timber and wood products. This tax was sponsored by the State Department of Conservation and by the lumber, wood pulp and other forest industries of the State. The proceeds are to be used for expanding the State Forest Conservation work.

The proposal for the State Wage and Hour Law failed to receive sufficient support to pass the legislature.

The legislature set up an interim committee to study the revenue system of the state to recommend changes to the next legislature. The committee has employed Dr. Paul Alyea of the University of Alabama to direct the study. Dr. Alyea has been on leave from the University for work with the Smaller War Plants Corporation. A thorough study of the tax system of the state covering state municipal and county levies is underway. The committee expects to have a report of the study and its recommendations for revision completed late in the summer of 1946.

The State Department of Revenue, the Alabama State Planning Board and the Bureau of Business Research of the University of Alabama have been co-operating in the study of the effect of taxation on industrial concerns. The study is based upon an analysis of the reports of domestic corporations over a period extending from 1943 to 1944. The study is approaching completion.

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The School of Mines and the Bureau of Business Research of the University of Alabama are co-operating in a study of the iron and steel industry of the Southeast. The work on natural resources will be handled by H. D. Pallister, a former director of the School of Mines of the University of Alabama and more recently with the U. S. Bureau of Mines; the marketing phase of the problem by H. D. Bonham, recently with WPB and WFA in Washington.

University of Alabama H. H. Chapman

GEORGIA

Upwards of 350 industries, not including freezer locker plants, were established or expanded in Georgia during the fourteen months ending in November, 1945, according to an incomplete survey made by the Agricultural and Industrial Development Board of Georgia. The industries established or expanded since September, 1944, include food-processing plants and factories to produce wood products, stone, clay and glass products, apparel, textile, chemical, paper and allied products, furniture and metal-products and transportation equipment. Every section of the state is represented. In addition to those industries included in this summary, the Board reports that approximately 75 freezer-locker plants have been set up in various sections of the state.

Indicative of the postwar development of Atlanta are the recent announcements of plants to be constructed in this area by General Motors and DuPont, the resumption of operations by the Chevrolet assembly plant with the first new car since the war rolling off the line in November, and the breaking of ground during this same month for the new Ford Motor Company assembly plant and

parts depot at Hapeville. The new Ford plant will be located on an 82 acre site just outside of Atlanta, and is planned as a one-story structure with 500,000 square feet of floor space, three times the size of Ford's first Atlanta plant, established 33 years ago. It will have the capacity to assemble 350 cars and trucks in an eight-hour shift. One shift will require the employment of between 1800 and 2000 persons, with an estimated annual payroll of around $5,000,000. The $6,000,000 plant is scheduled to be completed by fall.

According to the state auditor's report, revenue collections by the State of Georgia reached a three-year high of $59,485,025 for the fiscal year ending June 30, 1945. This compares to collections of $58,057,911 in 1944 and $56,314,254 in 1943. Principal sources of gain were liquor taxes, which were $1,300,000 above those of 1944, motor fuel taxes, which increased $1,600,000 over 1944, and inheritance taxes, up $280,000 over last year. Revenue from cigar and cigarette taxes, income taxes, general property taxes and poll taxes (eliminated as a prerequisite for voting by the new Constitution) all declined.

The motor fuel tax continued to be the chief revenue producer. It yielded $21,264,328, to which users of motor vehicles added a further $2,575,432 in payment of motor vehicle license fees. Income taxes provided $14,085,352 to remain the second most important source of revenue, followed by collections of $7,028,067 from liquor, beer and wine, $5,482,675 from the general property tax, $5,123,142 from cigars and cigarettes, $1,138,308 from business licenses and taxes and $431,018 from inheritance taxes.

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The index of business activity for Atlanta reached a peak of 215.4 in August, 1945, followed by a sharp decline in September to 207.5 and a further drop in October to 204.2. This compares with a figure of 198.4 for October, 1944, with 1935–39 as a base. Thus, after continuing its upward course with practically no interruptions for over six years, business activity in the Atlanta area, as measured by the index, seems to have at last joined the downward trend evidenced by business in the country as a whole. To date, the decline in the index has been occasioned primarily by a sharp decrease in the industrial and commercial consumption of electrical power and in railway express shipments, both of which not only fell off sharply in September, but also failed to register their usual seasonal gains in October. In fact, electric power consumption showed a further absolute decline in October. Long distance telephone calls also recorded a contra-seasonal drop during these two months, while the other components of the index, postal receipts and debits to individual accounts, responded to the stimulus of autumn with an increase in the October figures over those of September about equal to their normal seasonal advance.

Emory University ALBERT GRIFFIN

KENTUCKY

In November, Kentuckians heard a soul-searching report on the health of the state's citizens. The report was prepared by the State Health Commissioner

for the Committee for Kentucky, a non-profit, fact-finding group which has Kentucky's welfare as its sole objective. The problems faced by a state predominantly rural and never possessed of a high per capita income are vividly brought out by the findings. Space limits permit the mention of only a few. Two-thirds of the schools in the state do not have safe drinking water; two-thirds of the milk consumed in the state is not pasteurized; nearly one-fifth of the state's mothers have no doctor at childbirth; only one-sixth of total births are in hospitals; for 14,000 tubercular citizens there are only 800 hospital beds; seven out of ten children examined have dental defects, three have ear, eye, nose, or throat defects, and seven have posture or other defects; 100,000 Kentuckians have syphilis, and annually, at least 50,000 have gonorrhea; the state meets only a fourth of its responsibility to its feeble-minded; one-half the state's population is served by open privies; 333 communities with populations from 200 to 3,000 have no public water supplies; there is only one dentist for every 4,000 persons and in rural areas there are over 2,300 persons per doctor; about 30 per cent of all Kentucky men rejected for military service in World War II were rejected because of mental ill health or mental deficiency.

Of course there is no sure-cure remedy for these conditions. Part of the problem is making the public aware of the conditions; part is arousing a desire to remedy them; and part is the creation of the income to afford the remedies.

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Two amendments to the Constitution were approved by the electorate in November. One provided for absentee voting; the other prevented diversion of any funds raised by motor vehicle taxation from the road fund—another rigidity in a document already too rigid. Estimates of revenue diverted from the general fund to the road fund range from $2,000,000 to $2,500,000 in normal years, the fee for driver's license and the three-per-cent sales tax on new automobiles yielding the revenue diverted. It is difficult to tell whether or not the voters ever understood the issues. The use of the term "good-roads amendment" by the proponents may have influenced many. If the threatened repeal of the state's income tax should materialize, the general fund would be hard hit as soon as the "surplus" is dissipated. Certainly the proposed program of expanded expenditures on health, welfare, and education would be nipped before getting started.

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The sixteenth annual meeting of the Kentucky Municipal League heard a sweeping indictment of the administration of property taxes in the state by Professor James W. Martin of the University of Kentucky. Professor Martin did not necessarily advocate doubling of city taxes. He merely pointed out that "the property tax in Kentucky cities could be made to yield greatly increased revenue if each city took advantage of the assessment described by the Constitution and of the levy authorized by that instrument".

The Revenue Department has proposed to change the method of taxing the Southern Pacific Railroad, a Kentucky corporation, but without mileage in the

state, from a franchise basis to that of its non-operating intangible property. Such a change would effect a sharp rise in the roads-tax obligation, from $60,000 to over $4,000,000. Naturally the road has taken the matter to the Courts.

University of Kentucky RODMAN SULLIVAN

MISSISSIPPI

During the fall months the general business outlook in Mississippi appeared somewhat less favorable than it had in some time. For September bank debits fell below the level reached in previous years for the same month, and data furnished by the United States Employment Service pointed to a growing unemployment problem. In most areas the unemployment difficulties are, as yet, mild, but there are a few scattered areas where the problem is of sufficient size to cause concern.

On the favorable side of the business outlook picture are the facts that the figures for sales tax collections, telephones in service, and gas and electric connections were remaining at high levels or increasing. Construction figures, as measured by contracts awarded and to be awarded, indicated the beginning of postwar building. According to the Mississippi State College Bureau of Business Research, construction showed a 237 per cent increase in September over the 1944 figure. There was also a gain of 135 per cent over the preceding month.

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The Mississippi Agricultural and Industrial Board co-operating with the efforts of a number of towns has met with considerable success in enticing industrial organizations to locate plants in the state. At this time the Board's major efforts are devoted to publicizing the state's resources. It is believed that Mississippi is the only state in the nation with a legislative backed plan which permits municipalities, supervisors' districts, counties and districts to issue bonds for the purpose of erecting plants for the use of private industry.

University of Mississippi FRANCIS S. SCOTT

NORTH CAROLINA

The fact of prime economic importance in the third quarter of 1945 was the end of the war with Japan. Although contract cancellations and attendant production cutbacks occurred almost immediately upon the cessation of hostilities, there were few indications by the end of the quarter of postwar trends in North Carolina.

Building construction provided one of the better indices of postwar intentions of business in the state. Overall figures showed an increase of 35 per cent in estimated cost of construction from the first to the last month of the quarter. Broken down by type of construction, the data for the same periods reflected a 10 per cent increase in residential construction, a 20 per cent rise in "alterations, additions, and repairs," and a very sharp jump of 81 per cent in non-residential building.

It was not possible to discern a trend in the general business indications for

the quarter. Employment in industry in August showed the first slight increase since the first of the year, but resumed its slow downward trend in September. Payrolls, hours worked per week, and average weekly earnings, showed little change during the period. Cotton consumption in North Carolina was off 5 per cent from 1944; commercial failures in the Fifth Federal Reserve District for the first eight months of 1945 were more than double those for the similar period of 1944. Department store sales, on the other hand, were up 14 per cent over the first eight months of 1944 and debits to individual accounts, although levelling off, continued to increase.

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The North Carolina Department of Labor stated that more than five times as many children 14–17 years of age entered the labor market in 1944 as in 1940. This was held to be partly due to wartime relaxations in child labor laws, the relaxations taking the form, for the most part, of permits to work later hours. Disquieting was the fact that, following the end of the war, no decrease was noted in the number of new certificates being issued. Nevertheless, the Labor Department announced that North Carolina fell "far down among the list of states from the standpoint of percentage increase in the issuance of employment certificates," to 14–17-year-old children during the war.

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A development which may prove to be of far-reaching importance in North Carolina agriculture was the announcement that Turkish tobacco had been successfully grown at the Oxford Experiment Station. The North Carolina product obtained in these first experiments was slightly inferior to the native Turkish leaf, but even if no improvements are possible, it appeared to be of sufficiently high quality to make its culture profitable in the state. Imports from the Near East in prewar years averaged sixty million pounds annually, at a cost of approximately one dollar per pound.

A good example of the failure of bare statistics to show a true picture is provided in the comparative figures on North Carolina and United States adoption of hybrid corn. In North Carolina, 4 per cent of the corn acreage was in hybrid corn in 1944, as compared to 64 per cent for the nation, but the picture was not as dark as these data indicated. The previously-available hybrids were not adapted to the South, and rather than encourage the use of a product which was, under local conditions, inferior to the available varieties, the Experiment Station had for some years been working to develop locally-adapted hybrids. In the interim, farmers were encouraged to continue to use their old varieties. Hybrids which will thrive in a North Carolina environment have recently become available, and North Carolina acreage in hybrid corn should rise as rapidly as the supply of seed will permit.

Latest estimates (November 1) of the Crop Reporting Board indicate that North Carolina's cotton crop will be 440,000 bales from 587,000 acres, an average yield of 326 pounds per acre. This is far above the United States average yield of 231 pounds per acre. Tobacco auction prices in August were $44.32 per cwt.,

as compared to $43.58 in 1944. The 1945 commercial apple crop, estimated at slightly over 250,000 bushels, was the lowest on record, less than one-sixth of the 1944 crop. North Carolina used more fertilizer (1.5 million tons) than any other state in 1944–45. This was largely a result of two factors: (1) The large area and overwhelmingly agricultural character of the state; (2) The heavy concentrations within the state of cash cropping, especially tobacco, cotton and truck crops.

North Carolina State College FRANCIS E. McVAY

SOUTH CAROLINA

The cessation of hostilities has apparently not had a seriously adverse effect upon business and industrial activity in South Carolina. The production of goods under war contracts, of course, has been or is being greatly curtailed. Many manufacturers producing goods under war contracts, however, have a ready civilian demand waiting. This is especially true for textile products and, as labor becomes more plentiful, an increase in textile production is anticipated. The total amount of cotton spun into yarn by local mills during the third quarter of 1945, though, was 3 per cent smaller than during the third quarter of 1944 and 25 per cent smaller than during the corresponding period in 1942. Building permits were about $5\frac{1}{2}$ times as large in September 1945 as in September 1944 and construction contracts awarded were 68 per cent larger in August this year than in August last year, according to the Federal Reserve Bank of Richmond. Debits to individual accounts of member banks were lower in September 1945 than in September 1944 in Charleston and Greenville but higher in Columbia and Spartanburg.

Employment conditions serve as a good index of industrial activity. Unemployment in South Carolina has increased since V-J Day but the total number unemployed is still relatively small. Total unemployment benefits paid in the state (excluding unemployment allowances paid veterans) during the fiscal year ending June 30, 1945 amounted to $221,688, about one-fourth as much as for the fiscal year ending June 30, 1943. During the past four months $114,544 has been paid in the way of unemployment benefits. Allowances to unemployed veterans are greatly exceeding the unemployed benefits paid by the South Carolina Unemployment Compensation Commission to persons not having or exercising a veteran's status. Allowances to returning veterans amounted to $180,522 for the month of October; whereas, unemployment benefits paid by the South Carolina Unemployment Compensation Commission amounted to only $46,022. (The South Carolina Unemployment Compensation Commission handles the veterans' allowances but funds used are furnished by the Federal Government under the Servicemen's Readjustment Act and are handled separately from regular unemployment benefits.)

Unemployment benefits paid by the South Carolina Unemployment Compensation Commission continue to be only a small fraction of the total receipts. The trust fund amounted to $30,309,782 June 30, 1944. One year later, or June 30, 1945, it amounted to $36,759,273. The trust fund has further increased

by $2,213,997 during the past four months, and on October 31, 1945 totaled $38,973,270. Now that the fund has become large, interest earned contributes significantly to the annual income. During the fiscal year ending July 30, 1945, interest earned amounted to $610,491.

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The cash farm income in South Carolina will be larger than in 1944, despite a smaller production of cotton. Cash receipts from the sale of crops, livestock and livestock products during the first eight months of 1945 amounted to $139,000,000 as compared with $102,000,000 during the corresponding period last year, an increase of 36 per cent. This increase has been entirely due to increased returns from crops. Returns from the sale of livestock and livestock products amounted to $28,000,000 in both periods. The total cash farm income last year in South Carolina amounted to $255,000,000 and was 2½ times as large as in 1938 and more than twice as large as in 1941. The tobacco crop has brought farmers about $5,000,000 more than a year earlier and increased income from peaches and other crops is offsetting the reduction in income from the smaller cotton crop.

The crop outlook with respect to total volume of production was not as good at the end of October as it was somewhat earlier. The total volume of crop production, though, is expected to be about 2 per cent larger than last year and 15 per cent above the 10-year average (1934–43). Food and feed crops are expected to total 5 per cent more than in 1944 and 17 per cent more than average. The volume of feed grains will not quite equal last year's out-turn but is expected to be 10 per cent above average. The 21 per cent reduction in per acre yield of cotton heads the list in yields smaller than last year. The indicated yield per acre of tobacco, corn, oats, hay and Irish potatoes is well above that in 1944. The 1945 production of fruits and pecans is unusually large partly because of increased bearing capacity of trees. The production of eggs in October was 9 per cent smaller than in October 1944, but the output of eggs during the first ten months was slightly larger than during the corresponding period last year.

Farm Credit Administration, GLENN R. SMITH
Columbia, S. C.

VIRGINIA

According to year-end estimates, Virginia met surprisingly well the reconversion and re-employment problems of the first four months following the end of the war. The total number of workers released from jobs because of termination of war activity was approximately 30,000 by the end of the year. During the same period the number of job openings listed by employers in the 38 offices of the United States Employment Service increased, and far exceeded the total number of applicants for work. Many workers separated from war employment did not seek jobs immediately but took extended vacations, migrated to other sections, returned to household duties, or retired from the active labor market. A substantial number of workers, for one reason or another, declined pre-

vailing job openings as unsuitable. Even so, it was estimated that unemployment in Virginia did not exceed five thousand during the four-month period. Placement of released warworkers and returning veterans in peacetime jobs appeared to be keeping pace with reconversion progress within the state.

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With fairly satisfactory harvesting conditions, the 1945 production of farm crops was generally high. Increased production above 1944 levels occurred in corn, tobacco, potatoes, and soybeans; smaller crops of peanuts and apples were harvested. With a record yield of 32 bushels per acre, the largest corn crop in 15 years was produced on the smallest acreage in Virginia since 1868. The production of flue-cured tobacco was the largest since 1920, and the yield of 1450 pounds of burley tobacco per acre marked a new high record in Virginia. On the other hand, Virginia apple growers harvested one of the shortest crops in the state's history.

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The value of manufactured goods in Virginia amounted to $2,273,281,756 in 1944, which represented a four-per-cent increase over 1943. The tobacco industry, with $760,000,000 in manufactured products, continued to outstrip all others. Textiles, which employ the largest number of wage earners, rank second with $377,000,000, and food products are third with $298,000,000. Figures for shipbuilding, an important industry, were not released during the war. The influence of the war is apparent, however, in the metals and machinery figures, which increased 69 per cent above the value of the average annual output in the prewar base period of 1935–1939. During the same time the number of wage earners in this industrial group increased 219 per cent and the volume of wages rose 283 per cent, attributable in large degree to longer hours and overtime pay.

Total income payments to persons in Virginia for 1944 amounted to $2,672,400,000, an increase of 12.6 per cent over the 1943 total. Payments by the Federal government to military and civilian personnel in the state amounted to $808,000,000, approximately 42 per cent of the total amount derived from wages and salaries. The average per capita income for the state in 1944 was $880.

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The Virginia Highway Department has prepared a twenty-year program for "the development, improvement, maintenance, and replacement" of the 47,035 miles of primary and secondary highways over the state. The plan calls for the expenditure of more than $800,000,000 during the entire period, at the rate of approximately $40,000,000 a year. To finance the project, it is estimated that over $700,000,000 will be obtained from state sources in license fees, gas tax revenues, and other highway income and the remainder from Federal aid funds.

University of Richmond GEORGE M. MODLIN

PERSONNEL NOTES

Anna Virginia Austin, who did her undergraduate work at the Georgia State College for Women, has a teaching fellowship in economics at the University of North Carolina this year.

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L. James Arrington, instructor in economics, North Carolina State College, who has been on leave since 1942, first with the Office of Price Administration, and later with the Army, will return to his duties at the college on January 1, 1946.

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Karl A. Boedecker, formerly of the University of Wisconsin is now assistant professor of economics in the School of Business Administration, University of Tennessee.

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H. D. Bonham has returned to the University of Alabama after a three-year leave during which he has been in Washington with WPB and WFA.

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Louis K. Brandt, formerly of the Economics Faculty at the University of Texas, has come to the School of Commerce and Business Administration of the University of Mississippi as professor of economics.

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D. H. Buchanan has returned from his leave of absence with the Department of State and resumed his duties as professor of economics in the University of North Carolina.

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Lyle E. Campbell has resumed full time duties as professor of accounting at the School of Business Administration, Emory University, after a three-year leave of absence for war work.

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Cecil C. Carpenter, professor of economics at the University of Kentucky, returned to his teaching duties at the University October 1. He had served for three years as O.P.A. price executive for the Eastern District of Kentucky.

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Lt. George S. Craft, U.S.N.R., has been appointed Dean of the School of Business Administration at Emory University, and plans to assume his new post as soon as he is released from the Navy. Prior to the receipt of his Naval commission Lt. Craft was Vice-President of the Trust Company of Georgia in Atlanta.

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E. O. Dille, professor of marketing in the School of Business Administration, University of Tennessee, was employed during the summer as consultant in the

division of special studies in the Bureau of Domestic Commerce in Washington, D. C.

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H. M. Douty has resigned as Director, Program Appraisal and Research Division, National War Labor Board, to become Director, Labor Economics Staff, Bureau of Labor Statistics, U. S. Department of Labor.

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Dr. John Hedges Goff, consulting economist for the Bonneville Power Administration, has been appointed professor of business administration at the School of Business Administration at Emory University, effective in March, 1946.

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R. W. Green, associate professor of agricultural economics, North Carolina State College, is acting as part-time professor of economics at Meredith College, Raleigh, North Carolina.

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Robert D. Haun, professor of accounting at the University of Kentucky, will return to his teaching duties January 1. He has been O.P.A. price executive for the Western District of Kentucky for the past three years.

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Harold M. Heckman, on leave, has been appointed Assistant Treasurer and Chief Accountant of the St. Johns River Shipbuilding Company, Jacksonville, Florida.

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Clarence Heer has recently been appointed Kenan professor of economics by the Board of Trustees of the University of North Carolina.

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Edward E. Judy, instructor in accounting in the School of Business Administration, University of Tennessee, attended the summer session at the University of Illinois.

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Edward C. Keachie, now Captain in the Corps of Engineers, has been appointed associate professor of industrial management in the School of Business Administration, University of Tennessee, and will join the staff on his release from military service.

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Marshall D. Ketchum has been promoted to professor of economics at the University of Kentucky. During the current year he is serving as visiting associate professor of finance at the University of Chicago.

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R. O. Moen, professor of business administration, North Carolina State College, is on leave, acting as Chief, Survey and Analysis Section, Office of Price Administration, Raleigh, North Carolina.

W. J. Moore, head of the department of economics, Eastern State Teachers' College, Richmond, Kentucky, has been made dean of the College.

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Burton R. Morley has returned to the University of Alabama after a leave during which he was connected with the War Manpower Commission, as manager of the Mobile District.

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Olin T. Mouzon, who has been on leave with the Fuels and Lubricants Division of the Army Service Forces, has resumed his duties in the department of economics of the University of North Carolina as associate professor. He will continue as consultant to this organization.

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Gertrude Natusch, formerly secretary to Dr. John D. Black's graduate seminar in Agricultural Policy at Harvard University, is now instructor in economics at Agnes Scott College.

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During the past summer, Clyde William Phelps, head of the department of economics and commerce in the University of Chattanooga, served as Senior Economist, Federal Reserve Bank of Atlanta.

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W. Henry Pierce, formerly Bureau of Agricultural Economics representative in Land-Use Planning, recently returned from military leave, has been appointed assistant professor of agricultural economics, North Carolina State College.

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S. A. Rosenberg is on leave from Hampton Institute this year on a teaching fellowship in economics at the University of North Carolina.

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Ralph L. Sackett has resigned his position as professor of economics at the University of Mississippi to accept a similar position at the University of Miami.

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Robert T. Segrest, who has been on leave, was recently promoted to Vice-Chairman and Public Member of the Fourth Regional War Labor Board in Atlanta. Mr. Segrest had been Wage Stabilization Director of the Regional Board.

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Ewing P. Shahan, formerly of Miami University, Florida, more recently Director of Research and Analysis for the War Manpower Commission in Alabama, has been appointed assistant professor of business administration at Vanderbilt University.

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William H. Stead, formerly Dean of the School of Business and Public Administration and chairman of the department of economics at Washington University

in St. Louis, has accepted an appointment as Director of the Institute of Research and Training in the Social Sciences and chairman of the department of business administration at Vanderbilt University.

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Dr. Glenn W. Sutton, professor of finance, has returned to the University of Georgia after serving as Lieutenant Commander in the United States Navy. He is temporarily in charge of the Veterans' Bureau of the University.

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R. S. Winslow, who has been on leave with the War Production Board in Washington, has returned to the University of North Carolina. He is to have charge of the extension relations of the School of Commerce during the coming year.

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Dr. Dean A. Worcester, Jr. has been appointed associate professor of marketing at the University of Georgia to succeed the late Professor John W. Jenkins.

REPORTS

SOUTHERN ECONOMIC ASSOCIATION

REPORT OF THE TREASURER

RECEIPTS AND EXPENDITURES FOR THE FISCAL YEAR ENDED OCTOBER 31, 1945

November 1, 1944, Cash on Hand		$466.41
RECEIPTS:		
Annual memberships	$489.00	
Institutional memberships	20.00	
Dividends on Investments	12.97	521.97
		$988.38
EXPENDITURES:		
Stamps	$12.00	
Printing and Supplies	9.10	
Miscellaneous	16.25	
Dividends reinvested	12.97	
Southern Economic Journal	336.00	386.32
Cash on Hand, October 31, 1945		602.06
		$988.38
Fund Balance as of October 31, 1945		
Cash on hand		$602.06
Investments		528.74
Total		$1130.80
Investment Account		
Total investments as of October 31, 1944, Fort Hill Savings and Loan Association		$515.77
January 2—Dividends for July-December, 1944, Reinvested		6.44
July 7—Dividends for January-July, 1945, Reinvested		6.53
Total Investments as of October 31, 1945		$528.74

Clemson, South Carolina
November 1, 1945.

JAMES E. WARD, *Treasurer*

THE SOUTHERN ECONOMIC JOURNAL: STATEMENT OF INCOME AND EXPENSE FROM NOVEMBER 1, 1944 THROUGH OCTOBER 31, 1945

Cash Balance, November 1, 1944			$2,247.89
INCOME:			
Grants:			
University of North Carolina	$500.00		
North Carolina State College	250.00		
Woman's College, University of N. C.	250.00		
Total Grants		$1,000.00	
Annual Membership Fees		330.00	
Institutional Membership Fees		6.00	
Subscriptions	738.25		
Less Refunds	3.00		
Total Subscriptions		735.25	
Advertising:			
Receivables Preceding Year Collected	56.25		
Current Year	137.50		
Receivables Outstanding Current Year	61.25		
Total Advertising		255.00	
Miscellaneous Sales		86.00	
Total Income			2,412.25
Total Cash Balance and Income			$4,660.14
EXPENSES:			
Supplies and Materials		16.16	
Postage, Telephone and Telegraph		50.51	
Printing the Journal:			
Paid for October 1944 issue	486.49		
Paid for Current Year (January, April and July issues)	1,293.57		
Payable Current Year (October issue)	502.09		
Total Printing		2,282.15	
Other Printing		55.06	
General Expense		313.48	
Total Expenses			2,717.36
Balance, October 31, 1945			$1,942.78
Balance Represented by:			
Cash	2,383.62		
Accounts Receivable	61.25	2,444.87	
Less Accounts Payable		502.09	
Total			$1,942.78

BOOKS RECEIVED

Public Investment and Capital Formation. A Study of Public and Private Investment Outlay, Canada, 1926–1941. Ottawa, Canada: Department of Reconstruction, 1945. Pp. 128.

Farm Real Estate Situation in Five Areas of Tennessee, 1941–1944. By B. H. Luebke, A. H. Chambers and Magnus B. Johnson. Washington: United States Department of Agriculture, 1945. Pp. v, 52.

Democratic Administration. By Ordway Tead. New York: Association Press, 1945. Pp. 78. $1.25.

Southern State and Local Finance Trends and the War. By James W. Martin. Nashville, Tennessee: Vanderbilt University Press, and Lexington, Kentucky: University of Kentucky Press, 1945. Pp. 106. 50¢.

A Tax Program for a Solvent America. By The Committee on Postwar Tax Policy (Roswell Magill, Chairman and Harley L. Lutz, Director of Research). New York, The Ronald Press Company, 1945. Pp. x, 278. $3.00.

Tax Bill of a Selected Manufacturing Corporation in Six Southeastern States. By Clarence Heer. Raleigh, N. C.: North Carolina State Planning Board, 1945. Pp. 58.

The Social Framework of the American Economy. By J. R. Hicks and Albert Gailord Hart. New York: Oxford University Press, 1945. Pp. xvi, 261. $2.50.

Price Control and Business. By George Katona. Bloomington, Indiana: The Principia Press, Inc., 1945. Pp. xi, 246. $3.00.

Revista Cubana de Economia, Volume I, Number 2, March, 1945. Published by the Cuban Society of Economics, Teniente Rey, 405, La Habana, Cuba. Subscription price to non-members of the Society, $3,00.

International Trade and Domestic Employment. By Calvin B. Hoover. New York: McGraw-Hill Book Company, 1945. Pp. xii, 177. $1.75.

Review of Allied Military Government and of the Allied Commission in Italy. Published by Public Relations Branch Allied Commission, U. S. Army, APO 394. Pp. 127.

New Land Development Possibilities in Jones County, North Carolina. By F. J. Marschner and E. C. Weitzell. Raleigh, N. C.: North Carolina Agricultural Experiment Station in co-operation with United States Department of Agriculture, 1945. Pp. 25.

Universidad Interamericana—Investigaciones Sociales Y Economicas. Volume II, No. 4. Panama, Rep. de Panama: Inter-American University, 1945. Pp. 589.

The Road to High Employment. By Douglas B. Copland. Cambridge, Mass.: Harvard University Press, 1945. Pp. 137. $1.75.

National Power and the Structure of Foreign Trade. By Albert O. Hirschman. Berkeley and Los Angeles: University of California Press, 1945. Pp. xiv, 170. $3.00.

United Nations Primer. By Sigrid Arne. New York: Farrar & Rinehart, Inc., 1945. Pp. 156. $1.25.

Financing Government. By Harold M. Groves. New York: Henry Holt and Company, 1945. Pp. xv, 653. $4.00.

Wartime Land Market Activity, Appalachian Region, 1941–44. Quarterly Report of Bureau of Agricultural Economics, United States Department of Agriculture. Washington, Sept. 1945. Pp. 26.

Selection of Students for Vocational Training. By Fred M. Fowler. Washington: U. S. Office of Education, Vocational Division Bulletin No. 232. Pp. iv, 156.

Social Security, Past—Present—Future? By Gerhard Hirschfeld. Washington: The American Taxpayers Association, Inc., 1945. Pp. 116. $1.00.

Freedom Under Planning. By Barbara Wootton. Chapel Hill: The University of North Carolina Press, 1945. Pp. vii, 180. $2.00.

History of Banking Theory. By Lloyd W. Mints. Chicago: University of Chicago Press, 1945. Pp. 319. $3.50.

Effect of Federal Taxes on Growing Enterprises. By J. Keith Butters and John Lintner. Boston: Division of Research, Graduate School of Business Adminstration, Harvard University, 1945. Pp. ix, 226. $3,00.

Directors and their Functions. By John Calhoun Baker. Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1945. Pp. xiii, 145. $2.50.

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